Sixty-Sixth Annual Report

of the

Director of Public Health for the Government of Bombay

For the Year 1929

With Appendices

including the

Annual Reports of the Health Officers of the Ports of Bombay, Karachi and Aden

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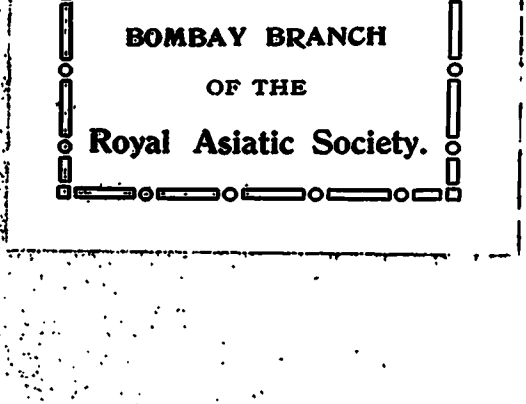

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ANNUAL REPORT ON PUBLIC HEALTH, 1929

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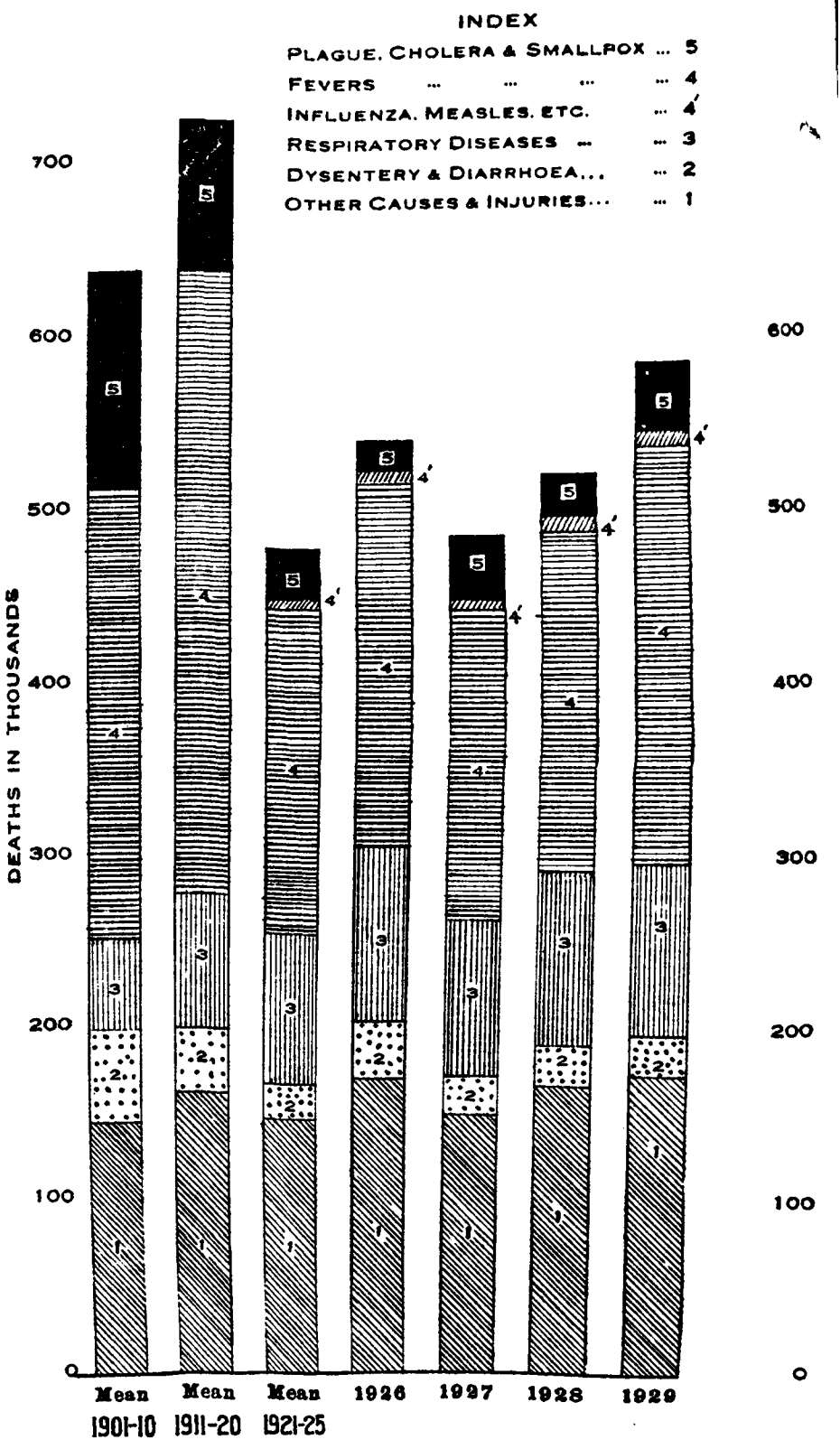
CHART I

DEATHS IN 1929 AND PREVIOUS YEARS



ANNUAL SANITARY REPORT FOR 1929

SECTIONS I TO IV—No Remarks.

SECTION V.

General Population and Vital Statistics.

Note.—The birth and death ratios are calculated on the Census population of 1921 :—Europeans 19,247 ; Anglo-Indians 10,221 ; Indians 19,165,614 ; total population of the Bombay Presidency—19,195,082.

1. *Europeans.*—265 births were recorded against 266 equal to a birth-rate of 13·77 per mille against 13·82 in 1928. Of the births, 144 were males and 121 females against 128 and 138 in 1928. There were 192 deaths equal to a death-rate of 9·98 as compared with 133 and 6·91 respectively in 1928. This rise is proportionate to an increase from 87 to 134 in deaths in Bombay City where 59 per cent. of all the Europeans in the Presidency reside. Of these deaths, 127 were males and 65 females against 88 and 45 in the previous year. Of the 192 total deaths, 7 were due to small-pox, 19 to fevers, 16 to dysentery and diarrhoea, 23 to respiratory diseases, 13 to injuries and 114 to all other causes as compared with 1, 9, 8, 25, 7 and 81 respectively and nil deaths from cholera against 2 in the previous year.

Of the 19 deaths from fevers, 8 were due to Enteric Fever—6 occurred in Bombay City and one each in Ahmedabad City and Sukkur District.

As stated above, Bombay City shows a rise in mortality among Europeans—91 male and 43 female deaths against 58 and 27 respectively in 1928.

Deaths by ages.—Of the total deaths, 21 occurred under one year, 13 between the age period of 1 and 5, 3 between 5 and 10, 29 between 20 and 30, 20 between 30 and 40, 33 between 40 and 50, 36 between 50 and 60 and 37 deaths were recorded in the age period of 60 and upwards making a total of 192 deaths in the Presidency as a whole.

2. *Anglo-Indians.*—265 births were registered against 245 in the previous year. The birth-rate per mille of population, for the year under report, was 25·93 as compared with 33·75 in 1928. Of the births, 125 were males and 140 females against 173 and 172 in the previous year. There were 178 deaths as against 192 in the previous year. The death-rate, per mille, for the year, was 17·41 against 18·78 in 1928. Of the deaths, 98 were males and 80 females against 111 and 81 in the previous year. Of the 178 deaths, 4 were due to small-pox, 16 to fevers, 18 to dysentery and diarrhoea, 43 to respiratory diseases, 8 to injuries and 89 to all other causes, as compared with 2, 17, 11, 59, 10 and 91, respectively and nil deaths from cholera against 2 in the previous year.

Of the 16 deaths from fevers, 5 were due to Enteric Fever—3 were reported from Bombay City and one each from East Khandesh District and Karachi City.

The Bombay City's contribution to the Anglo-Indian mortality was 65 male and 50 female deaths against 67 and 51 respectively in 1928.

Of the 115 deaths in Bombay City, small-pox caused 4 deaths, fevers 7, dysentery and diarrhoea 13, respiratory diseases 27, injuries 6 and all other causes 58, against 1, 7, 10, 38, 6 and 56 respectively in the previous year. Of the total deaths, 38 occurred under one year, 22 between the age period of 1 and 5, 2 between 5 and 10, 3 between 10 and 15, 8 between 15 and 20, 21 between 20 and 30, 20 between 30 and 40, 12 between 40 and 50, 21 between 50 and 60 and 31 deaths were recorded in the age period of 60 and upwards making a total of 178 in the Presidency as a whole.

3. *Registration areas and Indian Civil population.*—The Presidency is divided into 5 Registration Districts comprising 28 Collectorates (including Bombay City), 253 Rural Circles (Taluka and Mahal), 106 Town Circles and 9 Cantonments. Aden and Baroda Cantonments also submit returns to this Department. These divisions are shown in Appendix III to this Report.

According to the 1921 Census the Indian population of the Presidency including Sind (19,165,614) was distributed as follows :—

Rural circles 15,421,829 ; Town Circles 3,663,048 and Cantonment Circles 80,737.

Births.

4. The year 1929 may be considered as satisfactory like last year so far as the number of births is concerned. The year under report shows the highest number of births on record. The total number of births registered was 733, 520 showing a slight increase of 1,873 over the figures for 1928 and also of 79,346 on the decennial mean figure—654,174.

The number of births recorded in previous years and the corresponding birth-rates are as follows :—

Year	Births	Birth-rate	Year	Births	Birth-rate
1901-10 mean ..	617,736	33·42	1920 ..	593,175	30·28
1911 ..	705,090	36·00	1921 ..	624,640	32·59
1912 ..	684,690	34·97	1922 ..	620,770	32·39
1913 ..	684,803	34·96	1923 ..	681,910	35·58
1914 ..	733,076	37·43	1924 ..	662,321	35·60
1915 ..	726,780	37·10	1925 ..	664,384	34·66
1916 ..	704,672	35·98	1926 ..	710,135	37·05
1917 ..	699,823	35·73	1927 ..	706,285	36.85
1918 ..	619,224	31·61	1928 ..	731,647	38·17
1919 ..	546,460	27·90	1929 ..	733,520	38·18

The increase as compared with the previous year is shared by two Registration Districts—Southern 5,332 and Gujarat 3,545, while the Western Registration District shows a decrease of 5,470, the Central

1,634 and Sind 184, over the previous year. Bombay City shows an increase of 284 over the previous year's figure—23,623.

5. The birth-rate for the year for the Presidency as a whole was 38·27 against 38·17 in the previous year. For the Presidency proper excluding Bombay City and Sind the rate was 42·66 against 42·54 in 1928. The rates recorded in other parts of India for the last two years are given below :—

—	*1929*	*1928*	—	*1929*	*1928*
Madras ..	37·9	37·4	Bihar and Orissa ..	35·6	38·27
Bengal ..	29·26	29·57	United Provinces .	34·33	38·24
Assam ..	32·77	31·24	Punjab ..	44·45	46·30
Burma ..	26·43	25·85	Central Provinces .	43·96	46·51

It will be seen from the above table that there was a decrease in the birth-rate throughout India with the exception of Assam and Burma.

In the Western Registration District, the birth-rate for 1929 when compared with the year previous shows a decrease in all districts except Kolaba where there is a slight increase. The pandemic of Influenza of 1918 which carried away a great number of women of child bearing age was responsible for the lowest birth-rate in 1919. Since that year the birth-rate began to rise steadily. In 1919 the birth-rate was 31·57, in 1920 it rose to 34·16 and in 1921 to 34·87. In 1922 it was 36·20 and in 1923 it rose to 42·64. In 1924 it fell to 41·44. In 1925 it rose slightly to 41·95. In 1926 it was 42·37 and in 1927 43·99. In 1928 it was 46·27 which is the highest birth-rate recorded during the decennium. This considerably high birth-rate having been reached it has now fallen down to 44·89. The decrease is only apparent. This division showed a more rapid recovery in the birth-rate after the pandemic of Influenza and having reached its high water mark is now returning to normal.

In the Central Registration District, Ratnagiri and Ahmednagar Collectorates, show an increase and the rest show decrease. The decrease in the number of births in the Satara District is accounted partly by the prevalence of plague. In the Sholapur District the decrease may be attributed to the adverse economic conditions in this District leading to migration of population. The increase in Ahmednagar District is due to the reason that at the time of the last census 1921, the district was much reduced in consequence of the 1920 famine. The people now having returned the birth-rate has recovered. The increase in the Ratnagiri Collectorate may be due to the mill-strike during the year in Bombay which caused the return of mill hands in this district.

In the Southern Registration District the recorded number of births was the highest since the year 1921. All the Collectorates show an increase of births over the figure of previous year. There has been a steady increase of births in this Division since 1922 except a slight

decrease in the year 1928 and this has been made up by the figures recorded in each district in the year under report. Kanara District showed an appreciable rise of 2·44 over the rate for the year 1928.

In the Sind Registration District the number of births registered this year shows a decrease of 184 over the figures for 1928 but an increase of 8,895 over the decennial mean ending 1928 and 7,691 over the decennial mean ending 1918. The decrease is only shared by Larkana, Nawabshah, Sukkur and Jacobabad Districts. All other districts show an increase. The decrease in births can be partly attributed to the unusual amount of ill-health in these districts due to floods and breaches in the river, heavy rainfall, a heavy incidence of sickness chiefly fevers, pneumonia and cholera and consequently agricultural depression. The river rose to an unprecedented high level and distress caused by breaches and heavy rainfall was keenly felt in all parts of the Province especially Nawabshah, Jacobabad and Sukkur Districts.

In the Gujarat Registration District, the birth-rate for 1929 shows an increase in Kaira District by 2·74 and in Ahmedabad District by 4·00, while Surat, Broach and Panch Mahals show a decrease of 2·17, ·68 and ·71 respectively. Ahmedabad District recorded the highest birth-rate in 1929 during the last 10 years.

6. In the Presidency as a whole the birth-rate for rural areas was 39·98 and for urban areas 31·24 against 40·09 and 30·29 respectively in 1928. For the Presidency Proper excluding both Sind and Bombay City the rural birth-rate was 44·01 and the urban 34·53 against 44·10 and 33·11 respectively in 1928. Of the 27 districts in the Presidency the highest birth-rate was recorded in Ahmednagar (55·73) and the lowest (19·38) in Hyderabad. Twelve returned a birth-rate of 40 or more per mille of population, viz., West Khandesh (53·32), Nasik (49·29), East Khandesh (48·86), Sholapur (45·75) Broach (45·41), Belgaum (43·30), Satara (43·27), Kolaba (42·68), Bijapur (41·94), Ahmedabad (40·78), Panch Mahals (40·43) and Surat (40·14). Seven returned rates between 30 and 40, viz. Dharwar (39·24), Ratnagiri (38·43), Kaira (38·34), Poona (38·57), Kanara (36·63), Thana (34·03) and Karachi (30·65) and the remaining five Sind Districts returned low rates under 30, viz., Thar and Parkar (27·60), Nawabshah (26·29), Sukkur (25·24), Upper Sind Frontier (22·09), Larkana (21·30) and Bombay Suburban (21·02).

7. Of the 192 talukas, petas and mahals in the Presidency proper, 173 or as many as 90 per cent. returned rates over 35 per mille of population—37 of these areas yielding figures above 50, 88 areas, figures between 40 and 50 and 48 areas figures between 35 and 40, per mille. Ten returned rates between 30 and 35. The rates varied from 90·51 in Pathardi peta in Ahmednagar and 75·86 in Sakri taluka of the West Khandesh District to as low a figure as 19·27 in South Salsette and 17·04 in Poona City Taluka. Amongst others, showing low rates, the following 7 talukas comprising 4 per cent. of the total returned birth-rates below 30 per mille of population, viz., Mawal (29·84), Navalgund (29·84),

Yellapur) (29·13), Jamner (29·11), Bassein (28·83), Malcolmpeth (27·54) and Supa (23·05).

8. Out of 86 urban areas in the Presidency proper, 17 returned birth-rates exceeding 40, viz. Dholka (52·74), Dhandhuka (49·52), Nasirabad (48·82), Mehmedabad (48·27), Ahmedabad (47·02), Jambusar (46·49), Guledgud (45·73), Sholapur (44·03), Dhulia (43·04), Broach (42·91), Umreth (42·85), Erandol (42·59), Ranebennur (42·00), Ilkal (40·74), Parola (40·73) and Bhatkal (40·37). Thirty towns recorded birth-rates between 30 and 40 per mille of population and 32 towns showed rates between 20 and 30. In the remaining 7 towns the recorded birth-rates were under 20, viz. Karad (19·28), Bassein (19·01), Uran (18·80), Satara (18·57), Mahad (15·43), Thana (15·37) and Poona Suburban (4·29).

As remarked in previous reports, inefficient registration on the part of municipalities continues to be the chief factor in showing these inordinately low rates. In spite of the fact that Assistant Directors repeatedly bring the evils of defective registration of births to the notice of the Municipalities of the towns they inspect and suggest means for improving the system of registration, no attempt appears to have been made by any mofussil municipality in the Presidency for carrying out these recommendations.

Registration of vital statistics forms the basis of Public Health activities. Unless municipalities realise this fact and pay greater attention to it, the correct appreciation of their endeavours either to improve sanitation or increase the average duration of life cannot be realised.

The births recorded in Bombay City were 23,907 or 284 more than in the previous year equivalent to a birth-rate of 20·81 an increase of ·25.

9. The birth-rate for the Province of Sind was 24·57 against 24·63 in 1928. The birth-rate for rural areas was 21·54 and for urban areas 41·47 as against 21·71 and 40·87 respectively in the previous year pointing to the registration agency being defective. As usual, the urban birth-rate this year also greatly exceeds the rural rate in contrast to the Presidency proper where the reverse is invariably the case.

Of the 61 talukas and mahals in Sind, 8 or 13 per cent. returned birth-rates above 30 per 1,000 of population, viz. Diplo (49·29), Sukkur (38·59), Mithi (37·37), Chochoro (37·24), Shahadadpur (35·01), Nawabshah (33·95), Jamesabad (33·32) and Nagar Parkar (31·08). Twenty-three talukas or 38 per cent. returned birth-rates between 20 and 30, and the rates for the remaining 30 or 49 per cent. of the total were all below 20 per mille of population. The decrease in births can be partly attributed to the unusual amount of illhealth in the latter part of 1929 due to the prevalence of Cholera and Malaria and partly to the changes in the registration agencies—from the School masters to the Revenue Tappedars.

The efficiency in registration in the urban circles of Sind varies. Of the 19 town circles 12 show an increased birth-rate over the mean of the previous five years. Of the 7 showing decrease are Larkana, Ratodero, Sehwan, Sukkur, Shikarpur, Garhiyasin and Jacobabad. Three townss

recorded birth-rates over 40 per mille of population, viz. Karachi (55·83), Hyderabad (41·44) and Larkana (40·45). Twelve recorded birth-rates between 20 and 35 and the remaining 4 towns between 14 and 20. These are Jacobabad (17·39), Mirpurkhas (16·13), Sehwan (15·82) and Kotri (14·20). These municipal towns have been constantly figuring in previous annual reports as showing defective registration and the reasons for the default have also been pointed out.

To improve registration the Assistant Director, Sind, proposed the change of agency from Revenue Tappedars to the School Masters and Pound Munshis, and writes as follows :—

"In the year 1925 the Educational Inspector in Sind represented that Local Board Masters were not willing to maintain Birth and Death Registers without remuneration as the District Local Boards refused to pay them for the work. The matter being referred to the Commissioner in Sind he approached Government who in their reply regretted their inability to provide for funds for the purpose owing to financial stringency.

"The District Local Board, Hyderabad, having however, accepted the proposal of maintaining the birth and death registers by school masters the Collector of the district supported it by taking the necessary action and the Commissioner in Sind was again requested to ask Collectors to try and induce the other local boards to take similar action with regard to the registration of births and deaths. As a result of this the local boards agreed to do the needful in the matter. The Sukkur District which shows largest decrease first refused to take up the responsibility but on further reference by the Commissioner agreed to the proposal.

"It is hoped that as the registration has been entrusted to school masters and Pound Munshis it will show better results from next year."

10. *Births in Cantonments.*—Of the 9 Cantonments, Karachi (37·70), Nagar (28·10), Ahmedabad (14·89), Kirkee (18·02) and Belgaum (9·30), show the highest rates, while the lowest rates were recorded in Hyderabad (6·39), Poona (6·00), Santacruz (1·48) and Deolali (1·42). The low birth-rate is duly apparent as these stations have troops which although included in the census figures are unproductive so far as birth-rate is concerned.

11. *Births according to sex.*—Out of 733,520 births, 380,731 were males and 352,789 females equal to ratios of 19·86 and 18·41 per mille of population as compared with 380,159 and 351,488 and 19·83 and 18·34 in 1928. For every 100 female births there were 107·92 male births the previous year's figure being 108·15. The percentage of male to female births varied from 102·19 in Kolaba District to 142·45 in Upper Sind Frontier. The proportion of male to female births is high throughout Sind.

12. *Still births.*—11,079 still-births were registered or 1·51 for every 100 live-births. The percentage of still-births to live-births recorded varied from ·13 for the Upper Sind Frontier District to 7·69 for the city of Bombay. For other areas, Kanara (4·57), Dharwar (3·54), Kolaba (3·32), Bijapur (2·98), Belgaum (2·52), Karachi (2·35), Sukkur (2·32), Surat (2·28) and Bombay Suburban (2·01) show the highest percentages. The record of still-births is a fair creterion of the efficiency of registration.

13. In the Southern Registration District, omissions of 726 births and 104 deaths were discovered by Inspectors and Vaccinators against 710 and 105 in the previous year. The omissions of 35 births and 6 deaths were detected in the Western Registration District, of 693 births and 12 deaths in Sind against 1,615 births in 1928; of 446 births in the Central Registration District against 85 births and 18 deaths in 1928; of 268 births and 20 deaths in Gujarat Registration District, against 229 and 16 respectively in the previous year.

Deaths.

14. The year under report shows a considerable increase in the mortality over the previous year and also over the quinquennial mean. This rise is due to all the disease headings, and is specially noticeable under epidemics and fevers. The total number of deaths registered was 585,046 as compared with 522,885 in 1928 and 509,236 the quinquennial mean. Comparision is shown in graphic form at the beginning of this section. The totals for previous years are given in the following table :—

Year.	Deaths.	Year.	Deaths.
1901-1910 mean ..	639,483	1923	496,244
1911-1915 mean ..	539,836	1924	529,576
1916	652,584	1925	453,563
1917	798,406	1926	547,064
1918	1,724,074	1927	492,891
1919	637,170	1928	522,885
1920	516,296	1929	585,046
1921	498,350		
1922	452,581		

15. The recorded death-rate for the whole Presidency works out to 30·53. The death-rate in 1928 was 27·28, the quinquennial mean being 26·57.

For the other parts of India the death-rates recorded are as under :—

	1929	*1928*
Madras	25·3	26·4
Bengal	23·52	25·55
Assam	20·91	22·16
Burma	22·06	21·28
Bihar and Orissa	26·09	25·29
Punjab	26·75	24·72
United Provinces	24·26	24·15
Central Provinces	34·13	33·66

Excluding Bombay City and Sind, the death-rate for the Presidency was 32·05 against 29·92 in 1928. The death-rates for rural and urban areas for the Presidency as a whole were 30·46 and 30·79 respectively, against 27·18 and 27·68 in 1928.

Of the districts, the highest death-rates were returned by Sholapur (38·92), West Khandesh (36·18), Nasik (36·01), East Khandesh (35·93), Ahmednagar (35·05), Ahmedabad (34·89), Belgaum (34·70), Satara (34·41), Dharwar (34·20), Bijapur (32·99) and the lowest by Ratnagiri (24·14), Thana (25·08), Panch Mahals (23·86) and Bombay Suburban (19·27). The high death-rate in Satara, Sholapur, Belgaum and Dharwar was chiefly due to plague, while in the districts of East and West Khandesh cholera and small-pox and in Nasik cholera, small-pox and plague were the main causes of mortality.

Deaths by Registration Districts.—The increase in the number of deaths as compared with the previous year is shared by all the Registration Districts—Western 9,082, Central 780, Southern 16,963, Gujarat 4,581 and Sind 31,556, while Bombay City shows a decrease of 801 over the previous year.

16. Of the 192 talukas, petas and mahals in the Presidency proper, 28 as compared with 16 in the previous year show death-rates exceeding 40 per mille of population. These are Karjat (55·13), Pathardi (51·31), Mundgod (50·98), Nargund (50·81), Karmala (50·37), Shevgaon (50·24), Sakri (48·69), Navalgund (46·57), Nandgaon (46·38), Satara (45·01), Barsi (44·60), Man (44·17), Malegaon (43·95), Chopda (43·58), Newasa (42·87), Kalghatgi (42·81), Koregaon (42·40), Hukeri (42·37), Sangamner (41·56), Dhulia (41·49), Yeola (41·36), Shrigonda (41·31), Shirpur (41·14), Parola (40·97), Chalisgaon (40·82), Chandwad (40·79), Amalner (40·63) and Hubli (40·07). Thirty-five returned rates between 35 and 40, viz. Badami (39·64), Raver (39·52), Baglan (39·24), Sirsi (39·10), Sindkheda (38·53), Belgaum (38·51), Jambusar (38·49), Ambernath (38·42), Bilgi (38·31), Edlabad (38·29), Wai (38·02), Shahada (37·72), Khanapur (37·56), Malsiras (37·51), Jamkhed (37·48), Gokak (37·24), Madha (37·14), Bhadgaon (37·09), Mandvi (36·98), Jalgaon (36·97), Bhusawal (36·80), Erandol (36·47), Gadag (36·40), Indapur (36·39), Bankapur (36·19), Karad (36·17), Parner (35·90), Murgod (35·89), Purandhar (35·84), Kalwan (35·76), Khatav (35·63), Sinnar (35·50), Dhond (35·41), Wagra (35·23) and Siddapur (35·04). Fifty-two recorded rates between 30 and 35, 72 returned rates between 20 and 30 and the remaining 5 returned rates below 20.

17. For urban areas, death-rates varied between 64·53 for Malegaon town and 10·94 for Uran. Out of 86 urban registration circles in the Presidency proper, thirteen returned death-rates over 40 per mille of population, viz. Malegaon (64·53), Navalgund (54·45), Mehmedabad (54·36), Pandharpur (53·99), Ahmedabad (49·90), Barsi (49·02), Nadiad (44·89), Ilkal (44·20), Borsad (43·26), Poona City (40·94), Surat (40·69), Belgaum (40·54) and Yeola (40·04). Twenty returned rates between 30 and 40, viz. Gadag-Bettigeri (39·77), Nasik (39·07), Sholapur (38·53), Guledgud (38·35), Umreth (38·29), Dakore (37·67), Bagalkot (36·88), Jalgaon (35·28), Jambusar (34·75), Ranebennur (34·53), Baramati (33·93), Erandol (33·07), Dharwar (32·43), Chalisgaon (32·36), Viramgaon (31·39), Dharangaon (30·96), Bhiwandi (30·93), Nasirabad (30·69), Gokak (30·23) and Dhandhuka (30·04). Thirty-four recorded rates between 20 and 30 and the remaining 19 returned rates below 20.

18. *Corrected Death-rates.*—The following table gives the death-rates in accordance with age and sex distribution for the Presidency proper and for the six towns for which such correction is possible :—

	Standard death-rate.	Factor for correction.	Recorded death-rate.	Corrected death-rate.
Presidency excluding Sind ..	39·8	1·0	32·05	32·05
Ahmedabad	37·6	1·06	49·90	52·89
Bombay City	28·6	1·39	22·90	31·83
Poona	37·0	1·08	40·94	44·21
Sholapur	39·4	1·01	38·53	38·91
Surat	39·0	1·02	40·69	41·50
Karachi	38·5	1·03	39·97	41·16

19. The birth and death returns of the chief cities may be briefly noted on as follows :—

Bombay.—Population 1,148,815. 23,907 births were registered equal to a birth-rate of 20·81 as compared with 23,623 and 20·56 in the previous year. The registered deaths amounted to 26,306 as against 27,107 in 1928. The death-rate per mille of population was 22·90 against 23·59 in 1928. The number of infantile deaths was 7,188 equal to a ratio of 300·66 per 1,000 registered births as against a rate of 330·94 in 1928. The chief causes of death shown in the return were small-pox, respiratory diseases and all other causes. Pneumonia was as usual more prevalent in the City during the year under report.

Ahmedabad.—Population 270,899. The number of births registered was 12,724 equal to a birth-rate of 47·02 as against 11,827 and 43·70 respectively in 1928. The birth-rate during the year under report is the highest during the last ten years. The registered deaths were 13,503 corresponding to a death-rate of 49·90 as compared with 11,389 and 42·08 respectively in 1928. The chief causes of death shown in the returns were small-pox, fevers, respiratory diseases and all other causes. Measles was more prevalent in the city, 878 deaths being attributed to this cause. The number of infantile deaths was 4,220 equal to a ratio of 331·65 per 1,000 registered births as against a rate of 330·94 in the preceding year.

Poona.—Population 133,122. Births registered were 4,780 (3,074 registered and 1,706 detected from infant mortality) equal to a birth-rate of 35·91 as against 2,985 and 22·42 respectively in the previous year. The total deaths registered amounted to 5,450 equal to a death-rate of 40·94 as compared with 5,072 and 38·10 respectively in 1928. The chief causes of death shown in the returns were small-pox, fevers, respiratory diseases (pneumonia and phtisis again appear largely under the latter headings) and all other causes. Measles also caused a large number of deaths—147 equal to a ratio of 1·10 per 1,000 of population. Fifty-seven deaths from enteric fever were registered. The number of infantile deaths was 1,639 or a ratio of 342·90 per 1,000 registered births as against a rate of 553·10 in the previous year. The infant mortality rate

of this city is shown always as abnormally high mainly owing to defective registration of births. After numerous representations on the subject, the municipality are now taking steps to secure more accurate registration of births. The birth-rate (35·91) during the year under report shows a great increase of 13·49 over the previous year's figure of (22·42). It is hoped that the Municipality will continue its effort and show progressive improvement.

Karachi.—Population 199,014. The total births registered were 11,121 equal to a birth-rate of 55·83 against 10,755 and 54·04 respectively, in the previous year. 7,957 deaths were registered showing an increase of 2,359 over the previous year's figure—5,598. The death-rate was 39·97 against 28·13 in 1928 and 29·92 the mean of the previous five years. Small-pox, fevers respiratory diseases and all other causes were among the chief causes of death. Measles was more prevalent in the city during the year under report. It caused 912 deaths equal to a ratio of 4·56 per mille of population. Pneumonia recorded 1,666 deaths equal to a ratio of 8·33. Cholera caused 21 deaths only. The infant mortality rate per 1,000 registered births shows an increase from 190·42 to 230·55.

Surat.—Population 117,428. There were 4,515 births recorded as against 4,706 in 1928. The birth-rate shows a decrease from 40·07 to 38·45. The total deaths recorded were 4,778 equal to a death-rate of 40·69 compared with 4,331 and 36·88 respectively in the previous year. Small-pox was more prevalent in the city and caused 209 deaths equal to a ratio of 1·78 per mille of population. Measles and pneumonia caused 133 and 909 deaths equal to ratios of 1·13 and 7·74 respectively. Dysentery and Diarrhoea also show an increase from 367 to 445 deaths. The number of infantile deaths was 1,644 or a ratio of 364·12 per 1,000, registered births as against a rate of 348·70 in 1928.

Sholapur.—Population 119,347. 5,255 births were registered, equal to a birth-rate of 44·03 as compared with 4,775 and 40·01 respectively in 1928. The general health of the city as measured by the mortality rates was not so satisfactory as that of the previous year, notwithstanding the absence of epidemics. The deaths from fevers and respiratory diseases showed a marked increase as compared with the previous year, viz., 2,311 against 1,911 and 558 against 458 respectively. The total deaths from all causes rose from 4,284 equal to a death-rate of 35·90 to 4,598 and 38·53 respectively in the previous year. Measles showed an increase from 119 deaths in 1928 to 165 in the year under report. The infant mortality rate per 1,000 registered births fell from 246·93 in 1928 to 228·73 during the year under report. The birth-rate marks an increase of 4·02 per 1,000 of population on the previous year and constitutes the highest figure on record.

20. *Death-rate in Sind.*—85,866 deaths were registered as against 54,310 in 1928 and 54,975 the decennial mean. The recorded death-rate for the whole Province works out to 26·33 against 16·66 in 1928 and 16·61 the decennial mean. By Districts the highest death-rate (36·79) was recorded in Sukkur District and the lowest (15·18) in Thar

and Parkar District. All the Districts show a higher death-rate than that of previous year and also the mean except Thar and Parkar district. The decrease in Thar and Parkar district is due to less prevalence of cholera in that district. The urban (38·88) greatly exceeds the rural death-rate (24·08) as in previous years and is attributable to faulty registration in rural area. The urban death-rate ranged between 16·32 for Halla and 62·59 for Garhiyasin and the rural death-rate between 10·48 for Tando Bago and 58·28 for Sukkur taluka. Of the 61 talukas and mahals in Sind, 6 returned death-rates above 40 per 1,000 of population, viz., Sukkur (58·28), Ratodero (46·23), Garhiyasin (45·05), Shikarpur (43·18), Labdarya (42·49), and Larkana (40·44). Five recorded rates between 35 and 40, viz., Mirokhan (38·94), Manjhand (36·70), Waroh (36·64), Jacobabad (36·04), and Kandiaro (35·31). Four recorded death-rates between 30 and 35, 16 returned rates between 20 and 30 and the remaining 30 recorded rates below 20. Out of 19 urban circles in Sind, five recorded rates above 45 per mille of population, viz., Garhiyasin (62·59), Ratodero (60·56), Shikarpur (51·02), Larkana (50·84), and Kambar (47·42). Four returned rates above 35, viz., Karachi (39·97), Sukkur (37·81), Hyderabad (37·09), Rohri (37·00), Tatta (32·58) and Sehwan (32·12). Seven recorded rates between 20 and 30 and the one (Halla) returned rate below 20.

Deaths by Causes in Sind.—The sub-joined table shows the number of deaths recorded from various causes with their ratios per 1,000 of population during the year under report as compared with the same in the preceding year and the mean for five-years ending 1928:—

Causes of deaths.	1929.		1928.		Mean of five years.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
Cholera ..	6,411	1·97	214	·07	151	·05
Small-pox ..	747	·23	179	·06	715	·22
Plague ..	..	..	..	..	40	·01
Fevers ..	61,581	18·88	39,517	12·12	42,138	12·88
Dysentery and Diarrhœa.	1,033	·32	622	·19	630	·19
Respiratory Diseases.	7,355	2·26	6,658	2·04	6,159	1·89
Injuries ..	924	·28	916	·28	837	·26
Other Causes ..	7,815	2·39	6,204	1·90	5,902	1·81
Total ..	85,866	26·33	54,310	16·66	56,448	17·31

The above table depicts in its true colours the year under review as the blackest one on record during the last decade. The province passed through a series of calamities one after the other. Heavy rains and floods added to it locusts pest, practically runied the crops throughout Sind to the extent of 35 per cent. in some parts and in others even to the extent of 80 per cent. Epidemic of cholera and Pneumonia, Influenzal and Malarial fever followed the rains and floods. A large number of population physically, materially and mentally worn out as a result of loss of crops and in many cases loss of their belongings, etc., fell easy victims not only to the epidemic diseases but to other diseases also. Hence it will be noted that the marked increase in total mortality occurred to the extent of nearly 58 per cent. over the previous year. Cholera was responsible for 6,411 deaths and fevers for 61,581. Further comments on the situation of each district will be found in Section VI.

21. *Death-rate in Cantonments.*—The lowest death-rate 1·27 was recorded in Santa Cruz while Kirkee headed the list 25·40 (as compared with 30·78 in the previous year). Respiratory diseases in the latter Cantonment were responsible for 63 deaths equal to a rate of 7·88 per mille of population. Of these, 25 were due to pneumonia, 21 to phthisis and 17 to other respiratory diseases. The death-rates recorded in other Cantonments were Nagar (24·83), Belgaum (16·42), Ahmedabad 16·05), Karachi (14·40), Poona (12·44), Hyderabad (7·44) and Deolali (6·17).

22. *Births versus Deaths.*—Over the Presidency as a whole births exceeded deaths by 148,474 or a "natural increase" of ·77 per cent. on the population compared with 1·09 per cent. for the year previous. In the Presidency excluding Sind and Bombay City, the percentage of natural increase amounts to 1·05 as against 1·26 for 1928. In Sind, on the other hand, deaths exceeded births by 5,728 or ·17 per cent. of the population. In Bombay City also, deaths exceeded births by 2,399 or ·21 per cent. of the population. Further details are given in columns 6 and 9 of Annual Form No. II.

23. *Mortality according to Sex.*—299,778 male and 285,268 female deaths were recorded giving death ratios per 1,000 of each sex of 29·83 and 31·29 respectively, against 26·85 and 27·76 for 1928. For every 100 females 105·01 males died as compared with 106·61. In Sind, the ratio of male to female deaths during the year was 115·99 to 100 as compared with 127·74 for 1928. In Bombay City the figure was 121·10 to 100 as compared with 120·99 in 1928.

Infant Mortality.

24. There were 138,602 deaths under twelve months corresponding to a ratio of 188·95 per 1,000 registered births as against 131,913 or a ratio of 180·30 in 1928. The male and female rates were 196·45 and 180·87, respectively, as compared with 188·37 and 171·56 in the previous year.

DEATH RATE AT EACH AGE PERIOD

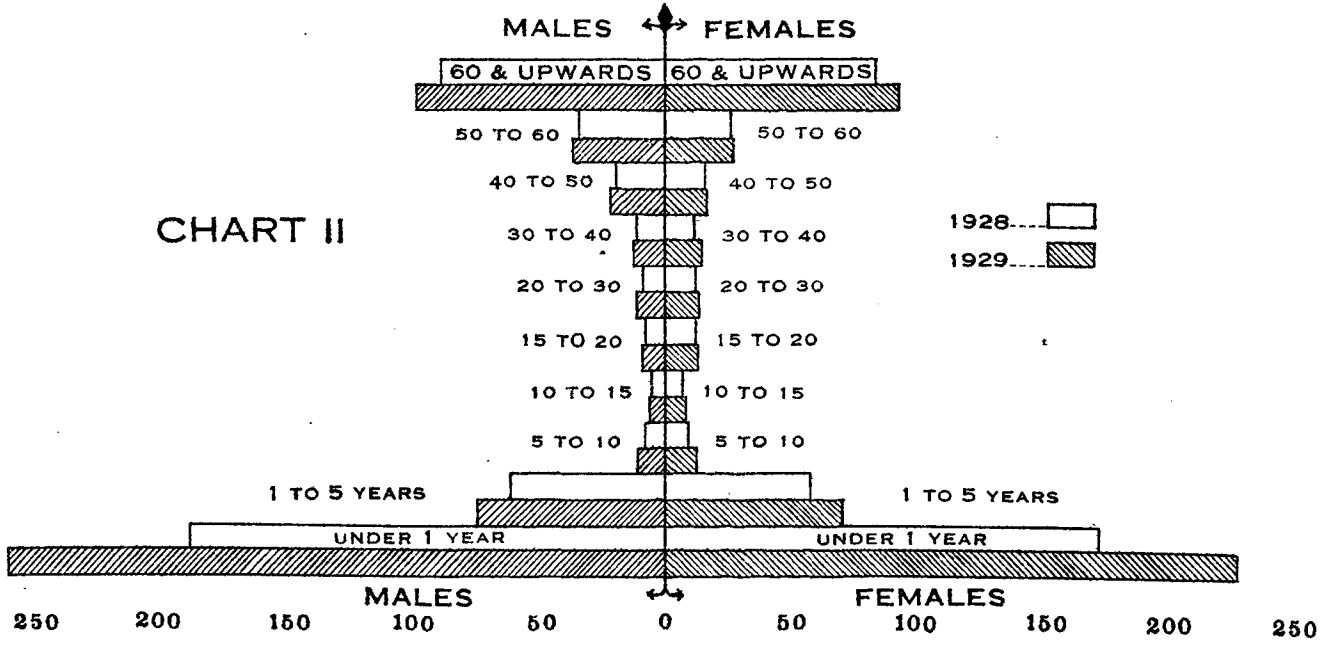


CHART II

Infant mortality 1929, compared with previous years :—

Year	Deaths under 12 months			Births registered	
	Male	Female	Total	Male	Female
1929	74,793	63,809	138,602	379,817	351,997
1928	71,611	60,302	131,913	380,159	351,488
1927	61,564	52,445	114,009	366,694	339,591
1926	75,030	63,183	138,213	368,823	341,312
1925	58,083	49,551	107,634	346,373	318,011
1924	70,489	59,950	130,439	353,631	327,690
1923	59,228	49,684	108,912	354,890	327,020
1922	57,130	47,841	104,971	323,631	297,139
1921	60,231	51,023	111,254	325,751	298,889
1920	59,236	49,440	108,676	309,463	283,712
1919	58,950	51,398	110,348	285,195	261,265
1918	94,553	83,124	177,677	322,546	296,678
1917	79,984	71,649	151,633	363,460	336,362
1916	75,328	65,304	140,632	365,057	339,615
1915	67,440	57,569	125,009	376,930	349,850

Year		Infant death-rate per 1,000 births			Infant deaths per 100 of total deaths
	Total	Male	Female	Total	
1929	731,814	196·92	181·27	189·39	23·69
1928	731,647	188·37	171·56	180·30	25·23
1927	706,285	167·89	154·43	161·42	23·13
1926	710,135	203·43	185·12	194·63	25·25
1925	664,384	167·69	155·81	162·01	23·73
1924	682,321	198·77	182·95	191·17	24·63
1923	681,910	166·89	151·93	159·76	21·95
1922	620,770	176·53	161·01	169·10	23·19
1921	624,640	184·90	170·71	178·11	22·32
1920	593,175	191·42	174·26	183·21	19·36
1919	546,460	206·70	196·73	201·93	17·32
1918	619,224	293·14	280·17	286·93	10·32
1917	699,822	220·06	213·01	216·67	18·99
1916	704,672	206·84	192·29	199·57	21·58
1915	726,780	178·92	164·55	172·60	24·43

Of the infants who died, 51,235 were in their first month of life (28,253 under and 22,982 over one week,) 49,469 over one month but not exceeding six months and the remainder 37,898 between six and twelve months. The percentage of total infant mortality under each of these three sub-groups works out to 36·96, 35·70 and 27·34 respectively.

The details of the average hundred infant deaths in each Registration District are given in the following table :—

	Infantile deaths				
	In every 100 total deaths	per 1,000 registered births	Not exceeding one month	1—6 months	6—12 months
Western	27·40	195·47	36·71	37·64	25·65
Central	24·41	179·64	36·96	37·78	25·26
Southern	19·85	163·01	43·31	34·72	21·97
Gujarat	24·67	189·53	35·00	34·92	30·08
Sind	19·55	209·46	33·34	32·12	34·54
Bombay City	27·32	300·66	34·24	29·44	36·32
Presidency	23·69	189·39	36·96	35·70	27·34

From the above table it will be seen that throughout the Presidency except the Western and Central Registration Districts mortality amongst infants was highest in the first month of life.

For the other parts of India the infantile death-rates are as under :—

	Infantile deaths per 1,000 registered births
Madras	180·04
Bengal	179·87
Assam	157·44
Burma	225·97
Bihar and Orissa	135·00
Punjab	186·20
United Provinces	168·61
Central Provinces	240·49

From the above table it will be seen that the highest infantile death rate per 1,000 registered births was recorded in the Central Provinces ((240·49), and the lowest (135·00) in Bihar and Orissa.

The urban and rural infantile death-rate per 1,000 registered births for the Presidency as a whole were 261·50 and 175·91 respectively, as compared with 250·71 and 167·38 in the previous year. The highest rural infantile death-rate was recorded in Sukkur (326·21) and the lowest in Ratnagiri (93·22). Among the larger towns the following recorded the highest rates :—

Pandharpur (498), Yeola (461), Shikarpur (456), Nadiad (370), Surat (364), Poona City (342), Satara (341), Larkana (341), Barsi (340), Nasik (335), Lonavla (334), Kotri (333), Ahmedabad (332), Viramgaon (319), Chalisgaon (309), Sukkur (298), Jalgaon (296), Tatta (290), Jacobabad (266), Kurla (260), Hyderabad (249), Malegaon (232),

Karachi (231), Sholapur (229), Godhra (209), Gadag Bettegiri (193), Dhulia (186) and Thana (179).

Detailed figures are given in Annual Form No. VI (*a*).

The Assistant Director of Public Health, Central Registration District reports :—

"The work of training dais under the Lady Wilson Village Maternity Scheme is progressing. During the year, new District Committees have been formed in the following collectorates, *viz.*, Panch Mahals, Broach, Belgaum, Dharwar, Bombay Suburban, Nasik, Satara, West Khandesh. In the following Districts, Associations have been formed though the actual work has not been commenced :—Ahmedabad, Kaira, Surat, East Khandesh, Ratnagiri. During the year 28 dais were trained. The total number of dais trained up to the end of December 1929 is 238.

The movement is slowly gaining ground. Arrangements are being made for secondary training of dais in Bombay with the co-operation of the Health Department of the Bombay Municipality and some honorary workers. On the whole the progress has been encouraging.

Government as in the previous year, sanctioned a sum of Rs. 10,000 to be given towards grants-in-aid for these centres, but the condition that the grant in each case should be limited to one-third of the total expenditure has been waived for two years."

The Assistant Director of Public Health, Southern Registration District writes : —

"*Action taken to prevent infant mortality.*—Fifteen qualified mid-wives were entertained by 11 Municipalities in this Division. They advised pregnant women on the importance of preserving their health and explained to them the dangers of allowing untrained midwives to attend the maternity cases. They advised the parents regarding the welfare and well-being of children to avoid premature deaths among them. In addition to the Municipal Midwives, the Red Cross Society of the Dharwar District entertained 9 midwives during the year.

The Belgaum Branch of the Red Cross Society did useful work through the infant welfare centre started by them in the previous year.

710 confinements were attended to by 24 Midwives in the Southern R. District.

A number of Baby Week Shows were held in rural and municipal areas of the Belgaum, Dharwar and Bijapur Districts. Some of these were organised by the Divisional Secretary of the Provincial Baby Week Committee and almost all the remaining ones by the Red Cross Society in co-operation with the Public Health Department with a view to educate the people regarding general sanitation. The travelling dispensary medical officer entertained by the Belgaum Red Cross Society carried on propaganda work on Public Health with the aid of Magic Lantern lectures in different centres of each taluka. 48 Lantern Lectures in 9 villages of Chikodi taluka and 9 of Athni taluka were given."

The Assistant Director of Public Health, Sind Registration District writes :—

"All the districts have shown a higher infant mortality rates except Thar and Parkar as compared with the preceding year. Among towns, Shikarpur showed the highest infant mortality rate (456·28) and Karachi the lowest (230·55). All the towns show highest mortality rates than the preceding year. During the year under report 461 labour cases were conducted in Sitaldas Tirathdas Maternity Home, Shikarpur, as against 569 in the preceding year. In Larkhana town which shows the next highest mortality rate, 118 maternity cases were attended to by Lady Doctor in charge of the Mrs. Hamid Ali Red Cross Maternity Home, Larkhana, as against 142 in the preceding year. Karachi city shows the lowest infant mortality rate due to the activities of Health Association Midwives, 851 maternity cases as compared with 742 in 1928 were conducted by the six midwives."

"The Health Officer, Hyderabad Municipality, says" in order to reduce the infant mortality, Miss A. Jones carried on her work during the year under report, of house visiting and particularly of visiting mothers before and soon after delivery. During the

calendar year 1929, 2329 house visits were made by Lady Health Visitor in different wards of the city. 453 labour cases were in all conducted by 3 midwives. In order to further reduce infant mortality, Magic Lantern lectures were organized in different parts of the city in order to educate ladies, girls and children and lectures on Hygiene, infant and maternal mortality, etc., were given by the Health Officer and the Medical Officer in charge T. B. Dispensary."

The following is a brief extract from the section that deals with infant mortality in the Annual Report of the Executive Health Officer, Bombay Municipality :—

" *Bombay City*.—The number of deaths among infants under one year of age was 7,225 being 243 less than in 1928 and 2,069 less than the annual average in the ten years 1919-28.

The infant mortality rate expressed as the number of deaths in infants per 1,000 registered births was 298 as compared with a rate of 311 in 1928 and of 443 the annual average in the decennium (1919-28).

Causes of Death.—It will be seen that 5,302 or nearly 73 per cent., of the total deaths in infants were due to diseases of the respiratory system, infantile debility and premature birth against 77 per cent., (5,735 deaths) in 1928. Diarrhœa and Enteritis caused 303 deaths, malaria, Ague and Remittent fevers 131 deaths and convulsions 662 deaths. The deaths from small-pox and measles numbered 240 and 37 respectively.

Quinquennial Averages.—Compared with the averages of the preceding five years, the total number of deaths was less by 553, the principal decreases in the mortality being 2 under measles, 3 under malaria, 146 under diarrhœa and enteritis, 15 under dysentery, 620 under infantile debility and premature birth and 89 under convulsions. On the other hand increases were registered under small-pox (103), Remittent fever and fever not defined (41) and diseases of the respiratory system (72).

Of the total deaths among infants, 1,542 or 21 per cent., took place in the first week of life and 933 or 13 per cent. in the age-period 1 to 4 weeks.

The mortality among infants who had not completed the first month of life was thus 2,475 or 34 per cent., of the total infant deaths. The number of deaths in the age-groups 4 weeks to 6 months and 6 to 12 months was 2,128 and 2,622 being respectively 29 and 36 per cent., of the total infant mortality.

The salient features are the magnitude of the role played by debility and prematurity in the causation of death in the first 4 weeks of life and the large proportion of deaths from respiratory diseases during the remaining 11 months of infancy."

Infant mortality by Races.—Infant mortality among the principal castes are Hindus all other castes 311, Hindus low caste 324, Mussalmans 312, Parsis 94, Jews 150, Indian Christians 288, Anglo-Indians 150 and Europeans 84.

The high rates recorded suggest the presence in Bombay of some adverse factor in addition to the poverty and ignorance which are chiefly responsible for high rates in western countries. The added factor affecting all classes is probably malaria ; another factor which can hardly fail to enhance the infant mortality among the more ignorant portions of the population is the practice of soothing babies by the administration of opium.

Syphilis contributes to the death roll but whether to a greater extent than in other cities it is not possible to say when an overwhelming majority of the total deaths under one year are not certified by medical practitioners.

The percentage of population occupying tenements of one room and under to the total number of occupants in all classes of tenements in the City by the Census of 1921 was 66. Of the 24,220 births registered in the year, 11,561 or 48 per cent., occurred in families living alone in a single room or sharing it with others, and the number of deaths in infants in this class of population was 5,625 or 78 per cent., of the total infant mortality.

It will be observed that the rate of deaths among infants in single room tenements per 1,000 births in such tenements during the year was 487 against 443 in 1928, and that the proportion of deaths to births varies inversely as the number of rooms occupied by the parents. For 2 room residences the figure is 368 ; 3 rooms 297 and four or more rooms 185 and for Hospitals 85.

Prevention of Infantile Mortality.—The work which is being done in Bombay for the reduction of infant mortality may be described under the following heads :—

(1) Visits by the municipal district nurses for the purpose of getting into touch with prospective mothers and for discovering cases of sickness especially among women and children and unvaccinated children ; for inquiry into the condition of new-born infants ; and for giving instruction by homely talks as to the care and rearing of children.

(2) Attendance on confinements.

(3) Provision of necessaries and comforts during the lying-in period.

(4) Maternity Homes.

(5) Infant Milk Depôts.

(6) Infant Welfare Centres.

Summary of Work.—During the year the municipal nurses paid 37,948 visits to houses, chawls and huts (against 41,461 in 1928), inquired into 3,132 cases of ordinary sickness, and reported 231 cases of infectious diseases and 513 deaths in the female population of the City. They also attended on 1,087 confinements (against 1,370 in 1928) and verified the reports of the Birth Karkuns on 6,250 births.

It will be seen that of the total number of 26,080 births (including 1,860 still-births) registered in the City during the year, 10,075 or 39 per cent. were verified by the municipal nurses as against 42 per cent. in 1928 and 1927.

Among the cases wherein enquiries were made, the proportion of births wholly un-attended was 4 per cent. and that of confinements attended by unskilled women 35 as against 5 and 34 respectively in 1928.

The percentage of confinements attended by qualified midwives (other than municipal) was 9 as in 1928 and that of confinements attended by municipal midwives was 11 as against 13 in the preceding year ; the percentage of children born in Hospitals showed an increase from 39 to 41 per cent.

The percentage of children born in healthy condition was 65 as against 69 in the previous year and that of children fed on breast was 66 as against 72 in 1928.

The proportion of children dying within 30 days of birth was 9 per cent. as against 10 in 1928.

The percentage of mothers who left home for work leaving their children to the care of others was 30 as against 31 in the previous year.

Relief to poor women during confinement in the shape of necessaries and comforts such as milk, bread, bed, blankets, charpoys and linen was continued during the year and dispensed in 271 cases against 362 in 1928 and 333 in 1927.

The total number of women admitted to the four municipal Maternity Homes during the year was 3,051 as against 2,850 in 1928. The number of cases confined in the Homes was 2,751 as against 2,597 in 1928. Of the women confined, 689 were primiparae.

Voluntary Welfare Centres.—The Maternity and Child Welfare Scheme of the Infant Welfare Society has made much progress. At the end of the year the centres established numbered nine. The Society provides through them (1) advice and instruction to mothers as to infant management, (2) medical aid to infants, and (3) a staff of trained nurses for visiting the homes of infants. Each centre is in charge of a Supervisor who is a trained nurse and a midwife. She supervises the milk distribution and assist the Lady Doctor in charge in attending on babies and advising mothers on infant management. There is also a Health Visitor, who is a trained nurse midwife attached to each centre. She visits the babies in the district and persuades their mothers to take advantage of the Infant Welfare Scheme.

During the year, 15,856 seers of milk were sold at 1 anna a seer, 9,898 seers at 2 annas a seer and 86,903 seers at 3 to 5 annas a seer. The number of new admissions at the nine centres was 5,495 and that of attendances for milk, medicine, treatment and advice 414,217.

The number of confinements attended by the midwives of the Society was 1,295.

A creche is attached to the DeLisle Road Centre and now contains 85 children."

25. Deaths by castes or classes and by sex are recorded in Annual Form No. V, Appendix III.

26. *Deaths according to causes.*—The following table shows the number of deaths in 1929 and the ratio per 1,000 of population arranged according to causes and contrasted with the figures for 1928 and with the mean for the preceding five years :—

Causes	1929		1928		Mean for five years	
	Number	Ratio	Number	Ratio	Number	Ratio
Cholera	9,084	·47	6,881	·36	8,280	·43
Small-pox	10,635	·56	5,265	·27	6,215	·32
Plague	18,014	·94	13,563	·71	9,864	·51
Fevers	246,428	12·86	206,356	10·77	202,738	10·58
Dysentery and Diarrhœa ..	25,108	1·31	23,371	1·22	26,509	1·38
Respiratory diseases ..	99,896	5·21	97,428	5·08	92,516	4·83
Injuries	8,277	·43	7,959	·41	7,726	·40
Other causes	167,604	8·75	162,062	8·46	155,387	8·11
All causes	585,046	30·53	522,885	27·28	509,236	26·57

From the above table it will be seen that there is a marked increase in mortality under all disease headings as compared with the previous year and also with the mean of previous five years.

Contrast graphs of the monthly incidence of deaths under the chief causes for the year under report compared with previous years are shown in Chart III. Also graphs of annual incidence of deaths under the chief epidemic diseases—cholera, small-pox and plague are shown in Chart IV.

Comments on the causes of death are made in section VI.

27. *Cantonments in Native States.*—The vital statistics of the Cantonments of Nasirabad, Neemuch, Mhow, Deesa and Rajkot have been omitted from this Report, *vide* Government Memorandum, General Department, No. 7402-D, dated 20th February 1929. The vital statistics of Baroda and Aden only are shown below.

Baroda.—Population 2,934. The total number of births registered were 25 giving a ratio of 8·52 per 1,000 of population against 25 and 8·52 respectively in 1928. The total deaths registered amounted to 29 equal to a death-rate of 9·88 against 22 and 7·50 respectively in the previous year. Fever caused 20 deaths, injuries 1 and all other causes 8.

Aden Settlement.—Population 44,000. The total number of births registered were 815 equal to a birth-rate of 18·52 per mille of population as compared with 639 and 14·52 respectively in the previous year. The registered deaths were 1,939 corresponding to a death-rate of 44·07 per mille of population as against 2,887 and 65·61 respectively in 1928. There were 168 deaths from small-pox. No deaths from plague were reported during the year under report as against 1,127 in 1928. Fever caused 202 deaths, dysentery and diarrhœa 427, respiratory diseases 480, injuries 10 and all other causes 652.

Aden Cantonment.—Population 650. The total number of births registered were 9 equal to a birth-rate of 13·85 per mille of population as against 14 and 21·54 respectively in the previous year. There were 25 deaths recorded as against 39 in the previous year. The death-rate was 38·46 per mille of population as compared with 60·00 in 1928. Three deaths were due to fever, 7 to dysentry and diarrhœa, 7 to respiratory disease and 8 to all other causes.

28. *Rainfall.*—Good rains were received over a major portion of the Presidency in June. In July and August the rainfall was generally defective except in Sind where there were heavy rains and in Gujarat, Konkan and places adjoining the Western Ghats the rains were almost sufficient. In September the situation was well progressed, Sind continuing to have heavy rains. In October rain was almost satisfactory except in Gujarat and parts of Sind.

Sind.—The year opened with an unprecedented frost in the whole Province of Sind in the last days of January and the beginning of February which seriously damaged the crop. There were heavy rains in July and August 1929 and the river rose abnormally and reached in September a line of unprecedented height. The suffering of the people due to the heavy floods has been unprecedented in the annals of Sind which caused complete destruction of crops, loss of cattle, and damage to house property. The districts of Nawabshah, Sukkur and Jacobabad were the worst sufferers and Hyderabad and Larkana comparatively less. The Shah Bunder Sub-Division of the Karachi District, the talukas of Diplo, Nagar Parkar and Mithi of the Thar and Parkar District were free from floods.

Gujarat.—Good rain was received in a large part of the Central Gujarat in June but in some parts of Surat and Ahmedabad districts the rainfall fell far short of the usual standard. Excellent rain was received in July almost throughout Gujarat except in some parts of Ahmedabad District. In August it was much below the usual amount. In September it was only a fraction of what was usually obtained in the Division at that time of the year. In October it was generally below the average in South Gujarat while in North Gujarat there was practically no rain.

Konkan.—The rains were good in June almost throughout the Konkan as regards quantity and distribution. In July the rainfall was also fairly good. In August the deficiency of rain was not appreciable. In September the rainfall although generally below the usual amount, was timely and well distributed and the general outlook was satisfactory. Good rains were received almost throughout the Konkan in October.

Deccan and Karnatak.—Good rains were received in Khandesh during June and in areas adjoining the Western Ghats in the Deccan and Karnatak. In July the rainfall was fairly good in the same area, while in the central portions of the Deccan and Karnatak, the rain received was barely enough. In South-East Deccan and East Karnatak the rains were definitely quite inadequate. In August the rain received in

the Deccan and Karnatak was only a fraction of that normally obta
In September, very good showers of the rains were received in the
week and again in the last three or four days almost throughout
Deccan and Karnatak. In October good rains were received in
Karnatak and South Deccan.

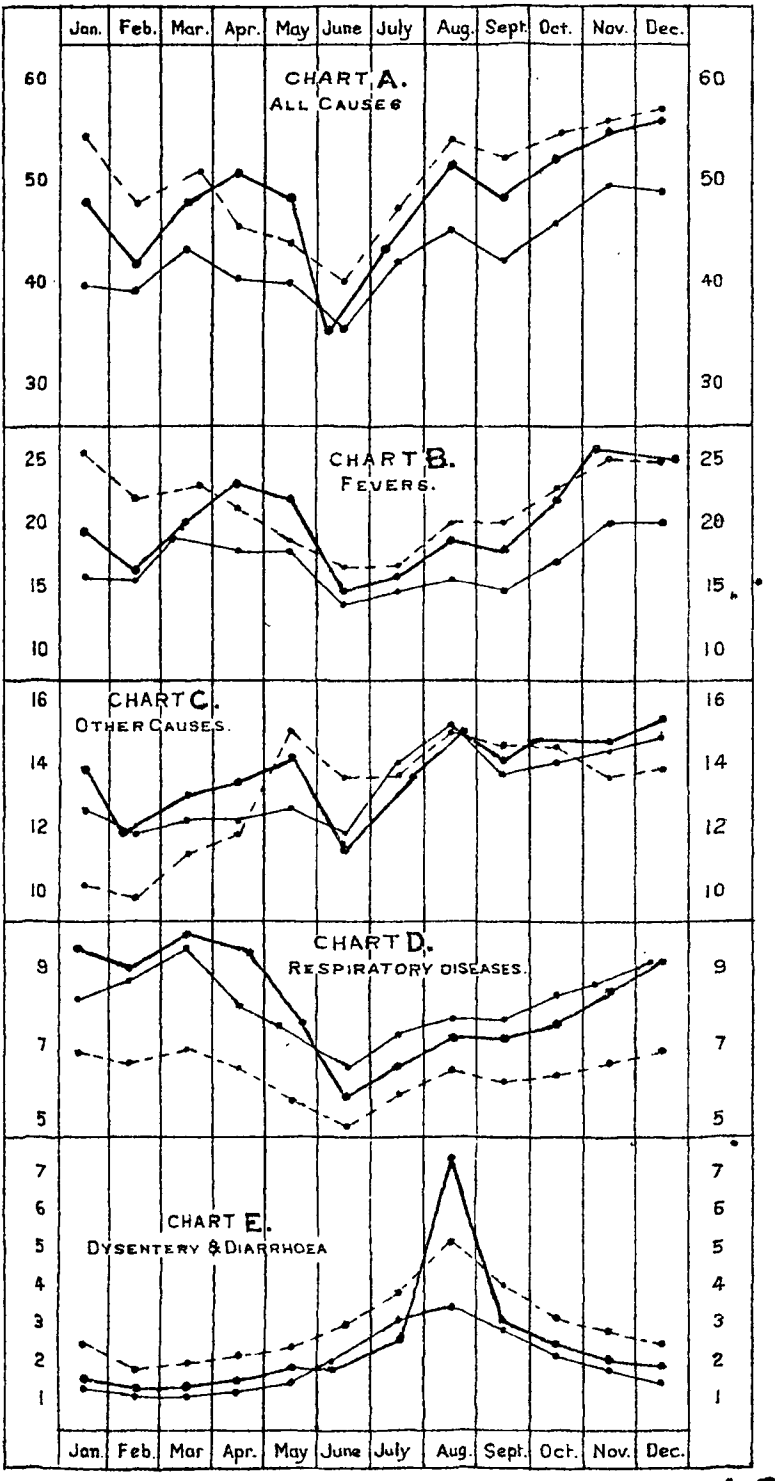
29. The prices of food grains in Gujarat were higher than
of the previous year by about 13 per cent. and in the Deccan 27
cent.; those in the Karnatak and Sind were also higher ex
Dharwar and Larkana where they were lower by about 10 per cent
4 per cent. respectively. Bombay rates were higher by 17 per
approximately.

CHART III

MONTHLY INCIDENCE OF DEATHS FROM CHIEF CAUSES.

1929 ●——● 1928 ——— PREVIOUS AVERAGE* - - -

SCALE FIGURES REPRESENT DEATHS IN THOUSANDS.



* 1918 (INFLUENZA YEAR) OMITTED IN THE AVERAGE OF CHARTS A. B. & D.

SECTION VI.

History of Chief Diseases.

General Remarks.

30. Following on 1928, the record year of high death-rate, the year under report also shows in comparison a further increase in the death-rate. The adverse feature in the health history of the Presidency during the year under report is characterised mainly by a large number of deaths from Fevers and the Chief Epidemic Diseases in the Presidency proper and the heavy incidence of Cholera and Malaria in Sind. The health history of the Presidency from 1918, the year of Influenza pandemic, judged by the total mortality figures is one of steady progress up to 1922, the year of a record of low death-rate (23·61) and thereafter of gradual rise to the standard above that which normally prevailed. Thus the death-rate figure for 1923—25·89, for 1924—27·63, for 1925—23·66, for 1926—28·55, for 1927—25·71, for 1928—27·28, and for the year under report 30·53, which is the highest during the last decade, indicates the return to the 1911-15 mean of 27·56, with which also it cannot favourably be compared. If we look closely into the records of the year, we find that cholera was prevalent in the Northern half of the Presidency while plague prevailed in the Southern. The districts in the centre had both cholera and plague. Small-pox was evenly distributed throughout the Presidency.

Influenza was present in Sind after the rains and floods, increasing the mortality figures under Respiratory Diseases.

When plague and cholera are prevalent, it is usually noticed that the deaths recorded under fevers and dysentery and diarrhœa increase probably due to defective diagnosis especially in the initial stages before the Village Officers are certain that they have an epidemic disease in their midst.

Malaria in an epidemic form prevailed in Sind after the floods. The mortality was high and affected chiefly children up to 10 years of age.

The number of births recorded in 1929 shows a slight increase over 1928 and similarly the infantile mortality rate. Scrutinizing the towns separately, it is noticed that the normal phenomena of increase in the number of deaths in proportion to the increase in the number of births is seen in the three towns, e.g., Ahmedabad, Poona and Surat. In Bombay, Sholapur and Karachi, however, although the number of births recorded in 1929 are more than 1928 yet the total number of deaths are less than the previous year. The improvement in the second group of towns can be placed to the credit of all Societies working for the welfare of infants and mothers in these towns.

Comparing the figures with those of the preceding year, "Fevers" show an increase of 20 per cent, "Dysentery and Diarrhœa" 7 per cent., "Respiratory Diseases" 3 per cent. and "Other Causes" 3 per cent., while the chief epidemic diseases—Cholera, Small-pox and Plague combined show an increase of 47 per cent.

Compared with the mean of previous five years 1924-28, there was an increase in mortality practically under all the heads—Fevers (10·58

to 12·86), Respiratory Diseases (4·83 to 5·21), other Causes (8·11 to 8·75) and the Epidemic Diseases—Cholera (·43 to ·47), Small-pox (·32 to ·56), Plague (·51 to ·94), while Dysentery and Diarrhœa shows a slight decrease (1·38 to 1·31).

Details of the various diseases are given under separate headings and further comparison is shown in the table in paragraph 26 and in graphic form in the Charts inserted in this Report.

Fevers.

31. Fever mortality shows a considerable increase over the previous year's figures—246,428 deaths (125,326 males and 121,102 females) against 206,356 in 1928 and also on the mean of the previous five years (202,738). The number of deaths from fevers during the year under report was the highest since the year 1921. The death-rate was 12·86 as compared with 10·77 in 1928 and a quinquennial mean of 10·58.

The annual mortality recorded under this heading in previous years is given in the following table :—

Year.	Fever deaths.	Rate per mille.	Year.	Fever deaths.	Rate per mille.
1901-10 mean..	258,497	14·00	1922 ..	197,888	10·33
1911-15 ,, ..	247,926	12·66	1923 ..	196,231	10·24
1916 ..	262,401	13·40	1924 ..	214,563	11·20
1917 ..	298,919	15·26	1925 ..	183,764	9·59
1918* ..	1,284,013	65·55	1926 ..	222,466	11·61
1919 ..	274,459	14·03	1927 ..	186,543	9·73
1920 ..	266,092	13·58	1928 ..	206,356	10·77
1921 ..	226,100	11·80	1929 ..	246,428	12·86

Distribution of fever deaths is shown in Annual Form No. IX.

In the Presidency as a whole all the Registration Districts and mainly Sind show an increase of fever deaths over the figures for previous year, viz., Sind 22,064, Southern 5,291, Central 5,286, Western 3,699, Gujarat 3,645 and Bombay City 87. The highest death-rates were recorded in Sukkur (30·54), Larkana (26·80), Upper Sind Frontier (26·69), Thar and Parkar (18·47), Ahmedabad (18·03), East Khandesh (17·56), West Khandesh (16·14), Sholapur (15·40), Nasik (15·06), Broach (14·99), Bijapur (14·48), Panch Mahals (14·31), Satara (12·88), Poona (11·88), Kaira (11·46), Kanara (11·20), Nawabshah (11·17), Dharwar (10·66), Karachi (10·49), and Hyderabad (10·32).

The urban death-rate was 8·43 and the rural 13·93 as compared with 6·32 and 11·84 respectively in 1928. As usual the rural death-rates are considerably higher than urban. The highest urban death-rates for the Presidency proper were recorded in Mehmedabad (29·99), Yeola (26·23), Borsad (24·43), Nadiad (22·81), Chalisgaon (20·69), Ankleshwar (20·41), Anand (20·32), Ahmedabad (19·63), Sholapur (19·37), Godhra (19·02), Pandharpur (18·21), Dakore (17·77), Barsi (17·39), Dohad (16·99), Viramgaon (16·42), Dholka (14·79), Nasirabad (14·44), Jambusar (14·00), Kapadvanj (13·18), Dhanduka (12·78), Baramati (12·68), Amalner (12·30), and Gadag Bettigiri (12·03) and in Sind, Garhiyasin (54·12), Ratodero (50·31), Kambar (32·05), Sukkur

* Influenza year.

(27·77), Shikarpur (23·04), Rohri (22·51), Nawabshah (20·57), Jacobabad (19·19), Larkana (17·57), Tando Adam (14·19) and Matirari (12·72).

Details of sub-headings of deaths from fevers are as follows:—

32. *Malaria.*—30,851 deaths from malaria were recorded against 44,683 in 1928. The figures are for Sind 10,211; Southern Registration District 7,025; Central 7,005; Western 5,778; Gujarat 621; as compared with 25,015; 6,808; 5,909; 6,015 and 645 respectively in 1928. Two-hundred and eleven deaths were registered in Bombay City against 291 in 1928. The Central Registration District shows a marked increase in the malaria deaths, which may be attributed to be due to improvement in the method of registration. Southern also shows a small increase while Western and Gujarat show a small decrease over the previous year's figures. The greatest decrease in the total figure for the Presidency as a whole during the year under report is, therefore, chiefly due to fall in Sind, for which the Assistant Director of Public Health, Sind Registration District, remarks as follows:—

"Strictly judging from the actual statements of vital statistics received in this office the year under report records only 10,211 deaths due to malaria against 25,015 during the previous year which means the death-rate of 3·13 against 7·67 in 1928. The inaccuracy of this record is evident. It clearly demonstrates the defective registration of vital statistics in Sind. This defective registration is to be attributed to the careless and ignorant manner in which the agency responsible for this work records the causes of deaths.

"If one were to judge the conditions of prevalence of malaria in Sind from the above figures, one would consider the year under review to have been remarkably free from malaria as compared with the previous year. But that this was not the case is within the knowledge of every one. The year under report is about the "blackest" year on record in Sind during the last decade or more. There has been an increase of over 31,556 deaths or 58 per cent. increase in the total mortality. Very abnormal conditions like heavy rains and floods etc., during the year brought on calamities of epidemics and diseases which claimed heavy mortality, particularly as compared with the last year. Cholera contributed to the extent of 6,411 deaths. Under fevers are recorded 61,581 deaths as compared with 214 and 39,517 respectively during 1928. Of the latter only 10,211 are attributed to malaria, against 25,015 last year. On the other hand during the previous year, the number of deaths recorded under 'other fevers' was 13,910 against 49,301 during this year, an increase of 35,391 deaths. But it is to be noted that 'other fevers' is a very convenient heading under which the registration agency in Sind enters the causes of deaths of any or all kinds of fevers. Therefore it is to be considered what these 'Other fevers' could be which claimed such a large excess of deaths over the last year. There were no epidemics of relapsing fever, enteric fever or influenza, etc. There was however a prevalence, to some extent, of 'sandfly fever and influenzal pneumonia.' This was probably responsible to a large amount of morbidity in Sind during the year. But it is an admitted fact that the mortality under Sand-fly fever is practically nil. Reports of all hospitals and other reliable agencies point to the great prevalence of malaria. Therefore considering all the facts and figures I come to the conclusion that this large excess of deaths under 'other fevers' as recorded by the registration agency is to be attributed almost wholly to malaria. So, roughly speaking, the actual deaths from malaria during the year under review may be assumed to be the number of deaths actually recorded as malaria *plus* the excess deaths recorded under 'other fevers' (that is 10,211 *plus* 35,391) which thus shows a very high figure of 45,602 against 25,015 of last year and this means an excess of something like 20,587 deaths over the previous year due to malaria."

The death-rate from malaria for the Presidency as a whole was 1·61 against 2·33 in 1928. The urban and rural death-rates were ·83 and 1·80 respectively, as compared with ·74 and 2·72 in 1928. As usual the rural death-rates are considerably higher than urban. The highest rural death-rates from malaria were recorded in Sind. Karachi District shows a rural death-rate of (4·43), Nawabshah (4·31), Sukkur (3·81), Thar and Parkar (2·95), Upper Sind Frontier (2·94), Larkana (2·59) and

Hyderabad (1·66). By urban circles the highest death-rates were recorded in Rohri (22·43), Larkana (12·94), Tando Adam (10·95), Kotri (9·36), Shikarpur (9·27), Sehwan (8·60), Umarkot (8·10), and the lowest in Karachi (·09) and Mirpurkhas (·34). No deaths were recorded in Sukkur, Kambar and Jacobabad Towns.

In the Presidency Proper, Poona (4·44), Ahmednagar (3·46), Kanara (3·16), Nasik (3·04), Belgaum (2·55), Dharwar (2·27), Bijapur (1·97) and Thana (1·86) returned the highest rural rates and the rates for Jambusar (13·31), Umreth (10·13), Bijapur (3·11). Ilkal (3·04), Malegaon (2·83), Yeola (2·80), Lonavla (2·67). Chalisgaon (2·50), Junnar (2·30) and Karwar (2·21) were the highest for towns.

33. *Anti-malarial measures.*—For the treatment of cases of malaria 38 Subordinate Medical Service officers were appointed by the Surgeon General on special duty—4 each for Thana and Kanara, 3 each for West Khandesh, Panch Mahals, Hyderabad and Thar and Parkar, 2 each for Dharwar, Kolaba, Poona, Karachi, Nawabshah and Sukkur and one each for Ahmednagar, Nasik, Belgaum, Ratnagiri, Surat and Jacobabad.

Preventive measures in Sind.—As to the preventive measures this year, there were in addition to free distribution of quinine in all Districts through various agencies, 22 Medical Officers appointed. Out of the total number of 22 temporary Medical officers, 7 were engaged on behalf of the Sind Relief Fund and 15 on behalf of Government. These Medical Officers were placed under the control of the Assistant Director of Public Health, from 10th December 1929. Before this, the Medical Officers had no sufficient medicines and were practically distributing quinine only. When they came under the control of the Assistant Director of Public Health, Sind Relief was approached and they undertook to defray all the costs towards the medicines, conveyance, pay of peons and other miscellaneous expenditure of the Medical officers. The drugs were replenished by the Sind Relief Fund on indent by the Assistant Director of Public Health. Besides drugs, they were supplied with fever mixture bottles which proved very effective.

In Sind, during the period from 14th September 1929 to 31st March 1930, 3,037 villages were visited by 22 Subordinate Medical Service officers. 54,084 malarial patients and 30,444 other patients were treated by them. During the year under report in all 304,374 malarial patients were treated at the various Civil Hospitals and Dispensaries in Sind—Karachi 53,979, Hyderabad 44,455, Thar and Parkar 14,353, Nawabshah 36,552, Larkana 52,258, Sukkur 78,370 and Upper Sind Frontier 24,407.

In all 20,20,000 quinine pills 5 grains and 200,000 quinine pills 2 grains were obtained by the Assistant Director of Public Health, Sind, during the year under report. Out of this stock 15,22,000 pills 5 grains and 24,000 pills 2 grains were supplied during the year to various Medical officers in charge of Dispensaries, Presidents of Municipalities and District Local Boards, Head Masters of Government Schools, Collectors and Deputy Commissioner in Sind, Chairman, Sind Relief Fund, Civil

Surgeons, Officers of Police Department, Health Officers of Municipalities, Poor Patients' Society, Karachi, and other Public Institutions and Vaccinators and Inspectors.

In the Southern Registration District, 8 Subordinate Medical Service officers were posted, one for Belgaum, 2 for Dharwar and 5 for Kanara and they visited 832 villages. Out of a total of 19,308 cases treated by them 13,088 were malaria and of 8,769 children examined, 5,049 were found to have enlarged spleens.

In the Central Registration District 245 villages were visited by 5 Subordinate Medical Service officers—one for Ahmednagar, 3 for Poona and one for Ratnagiri. Out of a total of 5,243 cases treated by them, 4,038 were of malaria. An idea of the extent of malaria prevalent in the Central Registration District can be formed from the record of the total number of malarial patients treated in the Civil Hospitals and Dispensaries which this year amounts to 84,072. The largest number 25,067 was from Poona District alone. Sholapur coming next with 20,680 and Satara 16,069. 11,943 was from Ahmednagar and the lowest 10,333 from Ratnagiri.

The Assistant Director of Public Health, Central Registration District carried out malaria survey in two districts—Poona and Sholapur in about 20 places. He examined 852 children out of them 194 were found to have enlarged spleens. The highest spleen rate was noticed at Parwati and Kothrud (near Poona) and the lowest at Dehu in Poona District. At the instance of the Commissioner, C. D., and the Superintending Engineer he submitted reports on Malaria surveys of (1) villages on Nila Mula valley on the banks of Mulshi Dam and (2) Malsiras Canal area. As a result of the enquiry it was found that the villages in the Nila Mula valley were not affected with any extra incidence of malaria or any other disease as a result of the Mulshi Dam, while in the case of Malsiras canal area it was found that the canal zone had undergone a severe epidemic of malaria traced to leakages from the canal. Advice on the preventive measures was given to 6 Government and semi Government officers.

In the Gujarat Registration District the Touring Medical Officers appointed on anti-malarial work, visited 294 villages in Surat and Panch Mahals District. Out of a total of 7,072 cases treated by them 5,103 were malaria. Out of 6,929 children examined 2,661 were found to have enlarged spleens.

In the Western Registration District, 566 villages in the malarious talukas of the West Khandesh, Nasik and Thana Districts were visited by Subordinate Medical Service officers. Out of a total of 10,370 cases treated by them, 5,119 were of malaria, out of 7,604 children examined 2,315 were found to have enlarged spleens.

34. *Distribution of Quinine.*—During the period under report Government sanctioned (1) Rs. 40,000 for free distribution of quinine (increased afterwards to Rs. 55,000), (2) Rs. 38,000 for sale of quinine at Post Offices (out of which Rs. 8,000 were transferred to the grant for free distribution) and (3) Rs. 10,000 for the cheap sale of quinine treatments.

On account of abnormal floods in Sind during the year and consequent rise in the prevalence of malaria Rs. 47,780 worth of quinine was distributed. Hence the first grant was increased to Rs. 55,000 by G. R.. G. D., No. 1110 of 5th November 1929. Total expenditure against this grant was Rs. 54,904. Quinine was distributed through Revenue and other officials, quinine worth Rs. 11,305 being distributed among school children in Sind by the Education Department. Quinine was also distributed by the Assistant Directors of Public Health, Inspectors of Sanitation and Vaccination and selected vaccinators.

Out of the second grant, Rs. 29,385 were spent in supplying quinine tablets for sale at Post Offices. The Superintendent, Yeravda Central Prison, credited a total amount of Rs. 32,203-8-0 realised from the sale into Government Treasury.

Out of the third grant, Rs. 9,820 were spent in preparing and supplying parcels of quinine treatments to officers of various Departments. The price recovered from them amounted to Rs. 13,605.

The Collectors of Karachi, Nawabshah, Thar and Parkar, Larkhana, Sukkur, Upper Sind Frontier, Kaira, Panch Mahals, Ahmedabad, West Khandesh, Nasik, Thana, Kolaba, Sholapur, Satara, Ratnagiri Dharwar, Bijapur and Kanara speak in favour of the quinine policy and its utility.

The free distribution of the drug has considerably popularized its use. Treatment of school boys with quinine propylaxis had its salutary effect on those suffering from enlarged spleens.

There is thus a consensus of opinion that the drug is advancing in popularity among the people, pills or tablets naturally enough being preferred to the powder.

35. *Enteric Fever.*—2,869 of the "Fever" deaths were registered as due to Enteric as against 2,254 in 1928. The accuracy of the figures of death allocated to this sub-head especially in rural areas is not to be relied on. The figures are for the Southern Registration District 1,568; Central 453; Western 397; Sind 257 and Gujarat 33, as compared with 1,244; 529; 5; 306 and 37 respectively in 1928. 161 deaths were recorded in Bombay City as compared with 133 in the previous year. Among town circles the highest number of deaths was recorded in Shikarpur (95), Poona City (57), Hubli (40), Larkana (36), Dharwar (33), Hyderabad (29), Surat (28), Karachi (26), Gokarn (21) and Bijapur (19).

36. *Measles.*—8,853 deaths were registered against 2,961 in 1928. The Western Registration District recorded the highest number of deaths—1,997; Gujarat 1,874; Sind 1,799; Southern 1,668 and Central 1,402 as compared with 1,106; 86; 241; 803; and 639 respectively in 1928. In Bombay City 113 deaths were recorded against 86 in 1928. The highest death-rates for urban areas were recorded in Mehmedabad (8·02), Karachi (4·56), Ahmedabad (3·24), Shikarpur (3·08), Dhandhuka (2·85), Sehwan (2·71), Borsad (2·64), Gokak (2·60), Chalisgaon (2·59), Larkana (2·59), Malegaon (2·53),

Ratodero (2·52), Tando Adam (2·47), Ranebennur (2·38), Kambar (2·37) and Nadiad (2·35).

Relapsing Fever.—No death was reported from this cause during the year.

Kala-Azar.—No death from this cause was reported during the year.

Influenza.

37. There was a slight rise in mortality from Influenza as compared with the previous year, the total deaths recorded during the year under report being 280 against 228 in the preceding year.

The following table shows the estimated number of deaths from Influenza for the first two years since its first appearance and as registered thereafter :—

Year.	Number of deaths.	Year.	Number of deaths.
1918	1,041,481	1924	578
1919	39,786	1925	192
1920	16,690	1926	362
1921	3,679	1927	267
1922	1,222	1928	228
1923	991	1929	280

The statement does not give a correct idea of the extent of the severity of the infection as the disease has come to be regarded as not a very serious affection when it prevails in a mild form. It is only when the epidemic is severe with the consequent rise in death-rate that attention is drawn to it. Most of the deaths during a mild epidemic are recorded under the convenient heading of "Fevers" or sometime under "Respiratory Diseases" which are frequently the sequalæ of the malady.

38. By Registration Distiicts the figures are :—Southern recorded 128 deaths from Influenza, Gujarat 60, Western 14, Sind 12 and Central 4 as compared in that order with 39, 15, 23, 45 and 29 respectively in 1928. Bombay City recorded 62 deaths as against 77 in the previous year.

In the Western Registration District, 8 deaths were reported from one village in one taluka and 1 death from one town circle in East Khandesh District, one death from one village in Akrani Taluka of West Khandesh 2 deaths from Malegaon Town in Nasik District. Two deaths from one village in Murbad Taluka and Bassein Town in Thana. Bombay Suburban and Kolaba Districts were free from the disease. In East Khandesh District there were 30 attacks and one death in April, 7 attacks and 7 deaths in May and 1 death in June. In West Khandesh there was one attack and one death in January. In Nasik there were 2 attacks and 2 deaths in April 1929. In Thana there was one attack and one death in February and one attack and one death in March. In Kolaba there was one attack in January and 2 attacks in August 1929. The usual preventive measures were carried out.

In the Central Registration District, only 4 deaths have been recorded during the year under report as against 29 for the previous year: Ahmednagar reporting 3 deaths and Poona one. Sholapur, Satara and Ratnagiri reported no deaths from Influenza.

In the Southern Registration District, 128 deaths were registered as against 39 in the year previous, showing an increase of 89 deaths. Of these 116 deaths were from rural areas and of the remaining 12 deaths, 10 were from two town circles of Gadag and Hubli and two were from Belgaum Cantonment limits. All other town circles were free. Amongst the Rural circles of the Division, Dharwar District recorded a large number (63) of deaths and Belgaum and Kanara 30 and 20 deaths respectively. The disease was prevalent in the first half of the year. No cases or deaths were recorded since July. The epidemic was chiefly prevalent in three rural circles of the Dharwar, four of the Belgaum and one of the Kanara Districts. The District of Bijapur was practically free and escaped with only three deaths. Enquiries made of the different Mamlatdars concerned show that the epidemic was of a mild type in all the Districts. Leaflets giving instructions for checking the spread of the disease were distributed to the village officers, Mamlatdars and Presidents of the Municipalities concerned. Isolation of the patients was advised and Dispensary Medical Officers were deputed by the Mamlatdars concerned to treat the patients.

In the Gujarat Registration District, there were 628 reported cases and 60 deaths from Influenza against 139 cases and 15 deaths in 1928. Out of these 625 cases and 57 deaths were reported from Panch Mahals District and 3 cases and 3 deaths from Surat. The remaining 3 districts Broach, Kaira and Ahmedabad were free from the disease. Out of these 625 cases and 57 deaths in the Panch Mahals 5 cases were reported from one village of Halol Taluka and the remaining 620 cases and 57 deaths were reported from Shivrajpur Mines and Baman Kuva Mines in the same taluka. Out of the 3 cases and 3 deaths in Surat District one case and one death was reported from each of the Surat and Bulsar towns, and one case and one death from one village of Chikhli taluka in Surat District. The Medical Officer in charge Shivrajpur mines was asked to adopt necessary measures. The epidemic in these mines was prevalent among all classes including the educated but the latter observed prophylactic measures suggested to them. The usual routine treatment was carried out with success and those more ill were treated as indoor patients in the segregation wards. As regards the origin of the outbreak the actual cause can not be ascertained but the epidemic started after the cold season was out and this year it was noticed to be of a more virulent type.

The Medical Officer of Dholka Dispensary reports in connection with Influenza at Chaloda village of Dholka taluka in Ahmedabad District :—

"From enquiry and examination of the patients I find that a wave of Influenza in the form of a mild epidemic has been passing and is on the decline. About a hundred persons are said to have been affected out of a population of about 3,000 but no death has taken place. I have treated those who were in want of treatment and have left necessary instructions with the leading men of the village."

In Sind Registration District, Influenza was prevalent in Karachi, Thar and Parkar, Nawabshah and Sukkur Districts. The total number of deaths recorded for the whole year was 12 against 45 in the preceding year. Of the 12 deaths, 3 were reported from Karachi, 2 Thar and Parkar and 7 from Sukkur Districts. In all 2 towns and 23 villages were affected and the total number of attacks and deaths was 185 and 12 respectively. The first fatal case of influenza aged 30 years, a Mahomedan by caste was reported from Karachi town on 10th January 1929. Influenza was declared in Sind Convict Gang, Hyderabad on 21st January 1929. The Medical Officer of that place adopted prophylactic measures to prevent the further spread of the disease. He further stated that the disease first appeared in warders and was of a mild form. Influenza broke out in Sukkur District on 27th March 1929. From 2nd to 5th April, 5 villages in Mirpur Mathelo taluka were affected, 36 cases were reported of which 7 died. All the necessary precautions were taken by the Medical Officer who further stated that all the persons were Mahomedan land cultivators. The population of all these 5 villages was about 150 souls. The disease was prevalent in Thar and Parkar District from 1st to 8th April. Only 9 villages in Chachero taluka were affected. 129 cases were reported of which 2 died. Printed instructions for the prevention and treatment of Influenza were sent to the Medical Officer and the Mukhtiarkar. Influenza was prevalent in Nawabshah District from 4th to 28th February. 9 villages in Nawabshah taluka were affected. 17 cases were reported with no death. No case or death was reported from Hyderabad, Larkana and Upper Sind Frontier Districts.

In connection with the epidemic of Bombay City, the Executive Health Officer reports :—

"The type of the disease was mainly respiratory but some cases of the abdominal type were also seen. Leaflets instructing the public what to do for the prevention of the disease were distributed and they were advised to avail themselves of the medical relief offered at the Municipal Dispensaries and Hospitals."

Respiratory Diseases.

39. There was an increase in mortality from Respiratory Diseases as compared with the previous year and also with the mean of previous five years, the total deaths recorded being 99,896 (54,177 males and 45,719 females) against 97,428 in 1928 and 92,516 the mean of previous five years.

The mortality list for previous years is as follows :—

Year	Deaths	Rate	Year	Deaths	Rate
1901—1910 mean.	57,723	3·12	1921 ..	93,336	4·87
			1922 ..	82,682	4·31
1911—1915 mean.	62,181	3·17	1923 ..	84,334	4·40
			1924 ..	91,103	4·75
1916 ..	79,882	4·08	1925 ..	83,047	4·33
1917 ..	90,667	4·63	1926 ..	103,038	5·38
1918 ..	119,680	6·11	1927 ..	87,963	4·59
1919 ..	98,633	5·04	1928 ..	97,428	5·08
1920 ..	96,486	4·93	1929 ..	99,896	5·21

The increase over the years preceding the Influenza pandemic (1918) is attributed partly to the actual number of deaths and partly to improved registration of deaths by causes.

The death-rate was 5·21 against 5·08 in 1928 and a quinquennial mean of 4·83. The urban death-rate (8·49) greatly exceeds the rural (4·42) as compared with 8·48 and 4·26 in 1928. The death-rate under this heading is still with the exception of "Fevers" and "Other causes" the highest in the Presidency.

40. Gujarat Registration District recorded the highest number of deaths 26,159; Central 21,660; Western 21,573; Southern 12,176 and Sind 7,355 as compared with 25,525; 21,639; 20,600; 11,028 and 6,658 in 1928. Bombay City recorded 10,973 deaths as against 11,978 in 1928.

The highest rates were recorded in the Collectorate of Surat (10·97), Kaira (10·67), Broach (9·14), Ahmedabad (7·89), Ahmednagar (7·15), Karachi (6·82), Nasik (6·32), Kolaba (6·23), Poona (6·12), Thana (5·81), Bombay Suburban (5·67), East Khandesh (4·53), West Khandesh (4·44), Sholapur (4·47), Belgaum (4·47), Bijapur (3·97) and Dharwar (3·64).

Urban areas recorded much higher rates than the rural, the result of congestion and consequent facility for the spread of these diseases and probably also due to more correct allocation of deaths under this head. There is a great need for better education in the methods of prevention of these diseases for the relief of congestion in the big towns, and the provision of greater facilities for treatment.

The highest rates for urban areas were recorded in Umreth (17·61), Hyderabad (15·07), Surat (14·35), Ahmedabad (13·89), Karachi (13·76), Poona city (13·43), Kaira (11·35), Jambusar (11·25), Viramgaon (10·96), Pandharpur (10·87), Nasik (10·37), Rander (9·76), Bulsar (9·75), Dhandhuka (9·43), Bhiwandi (9·19), Yeola (8·91), Nadiad (8·87), Umarkot (8·83), Dakore (8·51), Dhulia (8·41), Gadag Betigiri (8·09) and Mehmedabad (8·02).

41. *Phthisis.*—22,393 deaths from this cause were registered equal to a death-rate of 1·17 for the Presidency as a whole. The corresponding figures for 1928 were 21,588 and 1·13 respectively. By Registration Districts the total figures were Western 6,566; Central 5,605; Gujarat 4,641; Southern 2,841 and Sind 1,292 as compared with 6,059; 5,766; 4,619; 2,586 and 1,010 respectively in 1928. In Bombay city, deaths from phthisis were 1,448 equal to a death-rate of 1·26 compared with 1,548 or a death-rate of 1·35 in the previous year.

The urban death-rate was 1·80 and the rural 1·02 against 1·72 and ·98 respectively, in the previous year. The highest death-rates for urban areas were recorded in Bulsar (5·59), Bhiwandi (4·76), Erandol (4·64), Chalisgaon (4·17), Panvel (3·83), Ilkal (3·54), Belgaum (3·51), Poona city (3·45), Ahmedabad (3·44), Kapadvanj (3·38), Alibag (3·05), Thana (2·98), Dharangaon (2·97), Nasik (2·93), Karachi (2·86), Chiplun (2·82), Guledgud (2·77), Hyderabad (2·74), Surat (2·69), Navalgund (2·67), Kambar (2·63), Gokak (2·60), Ranebennur (2·51),

Dhulia (2·46), Baramati (2·44), Hubli (2·40), Kalyan (2·39) and Ratnagiri (2·35).

The highest death-rates for rural areas were recorded in the districts of Kolaba (3·60), Thana (2·20), Ratnagiri (2·02), Kaira (1·99), Ahmedabad (1·40) and Bombay Suburban (1·40).

Of the 245 deaths recorded from phthisis in the Kanara District, 172 or 70 per cent. occurred in the below-ghat talukas and the remaining 73 in above-ghat talukas. The high death-rates in the below-ghat talukas may be attributed to a larger amount of labour for mills in Bombay recruited from these talukas.

These remarks apply also to Ratnagiri, Kolaba and Thana districts which supply labour to Bombay city.

The Assistant Director of Public Health, Central Registration District writes :—

"In the rural circles Ratnagiri District alone gives a death-rate of 2·02 from phthisis nearly double that of any other rural circles in the Central Registration District, the causes being probably that labour returning from Bombay with the disease contracted in that city return to Ratnagiri from which district they are chifley recruited. Pandharpur town is the only town in the Sholapur District where a death rate from phthisis of 2·10 is reported. It is not known whether the death-rate from phthisis in this town is swelled up from imported cases from other districts or composed of local cases only."

42. In Hyderabad town, 199 deaths from consumption were recorded as against 112 deaths in the previous year and 175 and 224 in the years 1927 and 1926 respectively. It is gratifying to note that some definite attempts to reduce the spread of the disease have been made by the Municipality by the opening of a Tuberculosis Dispensary and appointing an officer from 1st May 1926 to attend to all Tubercular patients in their houses free of charge and also to the patients attending the dispensary. As usual, magic lantern lectures on Tuberculosis particularly consumption and protection from cold were given to ladies in different parts of the city. Disinfection of houses where consumptives were reported to have died was also carried on throughout the year. In order to remove the dust nuisance, a dust removal gang consisting of one Jamadar and 3 sweepers was employed throughout the year to remove the dust collected on the sides of the roads.

Tuberculosis Institutions.—The Anti-Tuberculosis Dispensary in Karachi City continued to do good work. During the year under report, 23,460 patients were treated. Of these 17,984 were Tuberculosis cases while 5,476 were treated for abscess. In the preceding year 21,986 patients were treated of whom 15,837 were definitely Tuberculosis while 6,149 were kept under observation and suspected of Tuberculosis. 932 new patients were admitted during the year as against 792 in 1928.

There are 2 special Health Visitors who during the year under report visited 17,256 houses as against 15,117 in 1928 and reported 442 cases as against 412 in the preceding year. Of these, 247 were Tuberculosis as against 238 in 1928. 2,629 visits were paid by the Medical Officers and 4,133 by the nurse during the year under report.

43. *Pneumonia.*—22,163 deaths were registered equivalent to a death-rate of 1·15 per mille of population for the Presidency as a whole. The corresponding figures for 1928 were 20,991 and 1·09 respectively. Sind Registration District recorded the highest number of deaths 5,058; Gujarat 4,519; Western 3,218; Central 1,581 and Southern 289; as compared with 4,728; 3,823; 2,678; 1,632; and 341, respectively, in 1928. Bombay City registered 7,498 pneumonia deaths against 7,789 in 1928.

The urban death-rate was 3·78 and the rural ·52 against 3·65 and ·48 respectively, in 1928. Amongst cities, recording the highest urban death-rates were Hyderabad (11·04), Karachi (8·33), Surat (7·74), Rander (7·47), Poona City (7·45), Umarkot (6·67), Nadiad (4·73), Nasik (4·47), Kotri (4·41), Tando Adam (4·32), Dhulia (3·26), Sehwan (3·17), Mirpurkhas (3·12), Kambar (2·63), Rohri (2·61), Matiari (2·59), Thana (2·58), Bassein (2·51), Tatta (2·36), Lonavla (2·29), Bhiwandi (2·13) and Bandra (2·09).

Bombay City recorded a death-rate of 6·53 against 6·78 in the previous year.

In the Central Registration District, 1,581 deaths from pneumonia were recorded against 1,632 in 1928. Of these, 991 deaths were reported from Poona City alone as against 1,081 last year. This is due to Measles and broncho-pneumonia compiled under pneumonia. The next urban circle to report the largest number of deaths is Poona Cantonment which reports 71 deaths. The death-rate from pneumonia in Poona City is 7·45, Poona Cantonment 2·78 and Kirkee Cantonment 3·13. The high incidence of pneumonia in Poona City seems to be a constant feature and deserves further investigation as to the causes.

In Karachi City, 1,666 deaths were registered against 1,392 in 1928 and in Hyderabad Town, 802 deaths were reported against 546 in the previous year.

Special measures against pneumonia were advised by the Assistant Director of Public Health, Sind Registration District, to the Collectors, Presidents of District Local Boards and Municipalities in Sind.

Cholera.

44. A somewhat severe epidemic of cholera prevailed from July to November and resulted in 9,084 deaths. In 1925 and 1926 there were 57 and 73 deaths respectively. In 1927 a severe epidemic of cholera prevailed from March to November and resulted in 26,153 deaths. In 1928 the mortality, viz. 6,881 deaths, was smaller. Previous bad cholera years were 1927 (26,153 deaths,) 1919 (51,551), 1912 (64,505), 1909 (28,714), 1906 (46,119) and 1900 (163,200).

The number of deaths recorded from Cholera was 9,084 against 6,881 in 1928 and 8,280 the mean of previous five years. The death-rate was ·47 against ·36 in 1928 and a quinquennial mean of ·43. The urban and rural death-rates for the Presidency as a whole were ·31 and ·51 respectively.

The following table gives the deaths recorded in previous years since 1900 :—

Year	Number of deaths	Year	Number of deaths
1900	163,200	1915	377
1901	13,600	1916	19,841
1902	3,229	1917	17,003
1903	1,825	1918	8,834
1904	13,156	1919	51,551
1905	5,396	1920	2,047
1906	46,119	1921	3,521
1907	7,656	1922	2,768
1908	1,759	1923	9,221
1909	28,714	1924	8,236
1910	3,694	1925	57
1911	5,817	1926	73
1912	64,505	1927	26,153
1913	5,134	1928	6,881
1914	17,779	1929	9,084

Distribution.—Vide Annual Form No. VII.

In the Presidency proper all the collectorates with the exception of Kolaba, Broach and Kaira were more or less affected while in Sind all the districts resported deaths. The epidemic was chiefly confined to the districts of East Khandesh (1,884 deaths), Nasik (396), West Khandesh (286). In Sind, Larkana reported the highest number of deaths (3,707), Karachi (1,353) Sukkur, (668), Hyderabad (249), Nawabshah (245), Upper Sind Frontier (186) and Thar and Parkar (3). Bombay City reported 8 deaths only against 32 in the previous year. It prevailed to a greater or lesser extent in 140 Registration Circles infecting 1,230 villages. The epidemic reached its height in August during which 5,535 deaths occurred and had practicably ceased by November, when 247 deaths were recorded. In December there were only 87 deaths.

45. To take the Registration Districts separately, their history is as follows :—

The heaviest incidence of cholera was in the Sind Registration District. 6,411 deaths (3,544 males and 2,867 females) were registered against 214 deaths (132 males and 87 females) recorded in the preceding year. The death-rate was 1·97 as against ·07 in the previous year. The epidemic first broke out in Sukkur Town on 25th May 1929. There were 5 attacks and 3 deaths between this date and 28th May, and two more cases occurred in the Loco-Quarters in June 1929. These cases were mainly among employees of the N. W. Railway and the presumption is that infection was brought to Sukkur from the Punjab where cholera was prevailing at the time. A study of this and previous epidemics reveals the fact that cholera enters Sind from the Punjab and spreads through two sources. (1) Through Canals and (2) Through the human intercourse. The epidemic started in Sukkur, spread to the adjoining villages, contaminated the Ghar canal and infected Larkana. Probably the drainage of Larkana entering the Ghar canal augmented the infection and it spread along its branches. The towns of Larkana and Shikarpur being infected, the people got panic stricken and ran away to all parts of Sind, which contributed to the spread of the disease far and wide throughout the Province.

This year it is noticed that cholera has not so much followed the footsteps of floods but there are two distinct rises one during the week ending 27th July and another very much higher in the week ending 24th August. Both followed heavy rainfall. The epidemic during the week ending 31st August showed a marked decline. The worst sufferer was Larkana District as was the case in the preceding year with 5,603 cases and 3,707 deaths as compared with 291 cases and 193 deaths in the preceding year. All the rural circles were affected. Out of 763 villages 493 were infected. Karachi District reported 2,008 cases with 1,353 deaths, Sukkur 1,283 cases and 668 deaths, Hyderabad 545 and 249, Newabshah 375 and 245, Jacobabad 326 and 186 and Thar and Parkar 5 cases and 3 deaths.

In Sukkur District cholera was reported from 7 talukas and 4 town circles from 25th May to 18th November 1929. In all 1,283 cases and 668 deaths were reported. Infection was brought in this district from the Punjab where cholera was prevailing at the time. A warning note against the danger of cholera entering Sind through the Punjab was communicated by the Assistant Director of Public Health, to all the Local Authorities. In Sukkur Town the total number of cases and deaths from cholera from the commencement of the epidemic, i.e. from 25th May to 23rd September 1929 were 132 cases and 58 deaths. The Municipality opened a cholera hospital and usual preventive measures were adopted. In all 6,000 persons were inoculated in the town. In Shikarpur Town, the total number of cases and deaths from Cholera from 18th July 1929 to 30th August 1929 were 325 and 129 respectively. The first case was imported from Rareja in Garhi Yasin Taluka. The Assistant Director of Public Health visited Shikarpur on 5th August and suggested opening of a cholera hospital, improvements in the town sanitation and pushing on anti-cholera inoculation. A Sub-Assistant Surgeon was secured from Ahmedabad and posted to Shikarpur. All schools were kept closed and Dr. Bhagwandas M.B., B.S., was appointed to work as Honorary Cholera Officer. 7,175 persons were inoculated. Among them there were only 7 attacks and one death. 30 persons were treated with bilivaccine with one attack and no death. Garhi Yasin Town recorded 113 attacks and 40 deaths from 21st July to 27th August 1929. Dr. B. J. Ajwani, D.P.H., who was appointed as temporary District Health Officer by the District Local Board, Sukkur, from 21st July 1929 was deputed to Garhi Yasin and he took the usual preventive measures. There were 70 cases and 29 deaths from 12th August to 20th September 1929 in Rohri Town, 370 inoculations were performed, Cholera hospital was opened and other Cholera preventive measures were carried out by the Municipality.

Larkana District was the worst affected. All the talukas and 5 Municipal towns were infected. The epidemic lingered from 25th June to 5th October 1929. The first case was reported from Pandi Golo in Larkana Taluka on the Ghar Canal on 25th June 1929. From this date to the 11th July, 10 villages, all on the banks of the Ghar, were infected. Last year infection spread along the Western Nara while during this year it spread to those villages fed by the Ghar and its branches.

The rapid spread of infection to the villages created a considerable amount of panic among the public and as a result the people fled to Karachi, Hyderabad and other Districts starting new foci of infection in various places accessible by rail in these districts. The total number of attacks and deaths from Cholera in Larkana District during the prevalences of the epidemic were 5,603 and 3,707 respectively. Dr. H. G. Kassim, M.B., B.S., District Health Officer, Larkana, took the usual cholera preventive measures in the Local Board limits. About 10,000 leaflets on precautions against Cholera, 2,000 leaflets on propaganda in favour of inoculation, 1,500 lbs. of potassium permanganate, 150 gallons of phenyle, 50 lbs. of Dr. Tomb's mixture and some other medicines were distributed. He reported that over 10,000 persons were inoculated and 3,000 persons were given Bilivaccine. The total number of cases and deaths from Cholera in Larkana Town from the commencement of epidemic, i.e. from 16th July to 7th September 1929 were 217 and 115 respectively. On 5th July 1929 two cases of Cholera were brought down from Garhi Md. Baka, a village in Larkana Taluka to the Civil Hospital, Larkana. The Civil Surgeon reported the fact to the Municipality. On 16th July the first local case of Cholera was reported. On enquiry it was learnt that a local resident had a bathing party on the Ghar Canal and on his return developed symptoms of cholera and died. Another case occurred the next day, when the Civil Surgeon, Larkana, issued the necessary instructions to the Municipality and a conference of all the Doctors and leading men in the town was held with a view to put anti-cholera measures into practical operations. A temporary Cholera hospital was opened and a Sub-Assistant Surgeon and two nurses and full menial staff were appointed and Volunteers from the town offered their services. The usual preventive measures were adopted. Ratodero Town recorded 120 cases and 42 deaths from 20th July to 15th September 1929. Usual preventive measures were carried out. The medical officer incharge Municipal Dispensary reported that 2,000 doses of bili-vaccine were given and 450 persons were inoculated and there was no death among them. Kambar Town returned 95 cases and 54 deaths from 18th July to 24th August 1929. The total number of cases and deaths from cholera in Sehwan Town from 6th August to 15th September 1929 were 49 and 24 respectively. In Bubak Town, in all 104 cases and 46 deaths were reported from 15th August to 5th September 1929. The usual preventive measures were taken.

Shahdadkot in Jacobabad District was infected from Pandi Golo of Larkana District on 22nd July and in its turn infected Jacobabad town on 1st August 1929. The total number of cases and deaths from cholera in this district from the commencement of the epidemic from 22nd July to 1st October 1929 were 326 and 186 respectively. Cholera was reported from all the five talukas and one Municipal town. A medical Graduate was engaged at Karachi and deputed to Jacobabad at the request of the Deputy Commissioner, Upper Sind Frontier, Jacobabad. 69 cases and 35 deaths were reported from Jacobabad Town from 1st August to 2nd September 1929. Usual preventive measures were adopted by the Municipality.

Hyderabad District also got infected through immigrants from Larkana District and the infection spread mostly below Hyderabad along the Fuleli Canals. Cholera was reported from all the talukas and towns from 12th July to 24th October 1929. The epidemic first broke out in Hyderabad taluka. In all 4,979 persons were injected with Anti-cholera vaccine. The usual precautionary measures were adopted by the District Local Board. The total number of cases and deaths in this district from 12th July to 24th October 1929 were 545 and 249 respectively. The municipal Health staff in Hyderabad City had been augmented by securing the services of Dr. Advani, D.P.H., as an Honorary Additional Medical Officer of Health and increasing the number of the conservancy staff by 30 sweepers and two more Sub-Inspectors. Attention to the sterilization of drinking water supplies, provision of remedies both for the prevention and cure of cholera, provision of a cholera hospital and carrying on a vigorous inoculation campaign were some of the items which were engaging the attention of the Municipality. The first case was imported from Larkana and occurred on 9th August 1929. The total number of cases and deaths from cholera in Hyderabad town from the commencement of the epidemic from 9th August to 31st October 1929 were 41 and 28 respectively. Hala Town recorded 29 cases and 13 deaths, Tando Allahayar 38 and 20 and Nasarpur town 113 and 47 respectively. The usual precautionary measures were carried out.

Karachi District also got infected through immigrants (Fishermen) from Larkana and the infection spread mostly in fisheries. In this district cholera was reported from all talukas with the exception of Karachi and Kohistan. Four municipal towns, viz., Karachi, Kotri, Tatta and Keti-Bunder and also Karachi Cantonment reported cases. The usual preventive measures were adopted and services of qualified Inspector of Sanitation and Vaccination, Karachi District, were made available everywhere, where medical aid was not available. One Medical Officer was deputed from Karachi Civil Hospital and another was obtained from Ahmedabad as none was available in Sind at the time. Karachi District reported 2,008 cases with 1,353 deaths. In Karachi City, the first case was imported from Larkana on 5th August 1929. It was detected the next day and removed to the Infectious Diseases Hospital, Karachi, where he died the same evening. As there was a large influx of people from infected parts, the Medical Officer of Health introduced a system of regular inspection of all incoming passengers by rail. When the influx from Shikarpur became very great, a Pilgrim Camp was formed and the Shikarpuries were segregated there. About 2,000 people at this camp were inoculated. Immigrants over 37,892 arrived at Karachi from different parts of Sind, from 1st August 1929 and 13 cases were reported among them. The total number of cases and deaths in Karachi City from 5th August to 11th September 1929 were 22 and 21 respectively. The number of inoculations was 13,041 and 3,500 Bilivaccine doses were given.

Tatta town recorded 41 cases and 30 deaths from 3rd August to 14th September. 175 persons were inoculated and 211 were given

Bilivaccine. Kotri town returned 71 cases and 47 deaths from 17th August to 22nd September 1929. Out of these 47 deaths, 7 occurred on boats and 11 in the houses of fishermen situated on foreshore of the river. The infection in this community was brought by the boatmen from Mirpur-Bathoro Taluka. The services of the Inspector of Sanitation and Vaccination were kept at the disposal of the municipality who suggested the usual preventive measures. 874 persons were inoculated in town limits. In Keti-Bunder town, the total number of cases and deaths from 5th October to 4th November 1929 were 38 and 22 respectively. The infection was brought from the taluka by a hawker as cholera was already prevalent in Keti-Bunder Mahal. In all 747 inoculations were performed. Only one case of cholera was reported from Karachi Cantonment.

In Nawabshah District the first case was reported from Tharu Khashkeli village in Shahdadpur taluka on 12th August 1929. Cholera was reported from all the 7 talukas and Shahdadpur Town. In all 375 cases and 245 deaths were reported. The usual cholera preventive measures were adopted by the District Local Board. Shahdadpur Town recorded 21 cases and 11 deaths. In all 798 persons were inoculated.

Thar and Parkar District was very lightly affected. Five cases and three deaths from cholera were reported. Mirpurkhas Town reported two cases and one death only. 883 persons were inoculated and 25 persons treated with Bilivaccine.

Action taken.—Warning about the prevalence of cholera in the Punjab and the danger to Sind was communicated to all the Local Authorities well in advance. The Collectors were requested in the earlier part of the year to ask the Mukhtiarkars and municipalities to see whether their stock of potassium permanganate and cholera treatments were up to the standard fixed and if not to indent at once for replenishing their stock. The request was complied with in all Collectorates. They were also requested to issue a Circular that the first outbreak of cholera in any town or village should be communicated by telegram and subsequent reports by post. The Medical Officers in charge of Dispensaries and Hospitals were asked to lay in stock the ingredients of Dr. Tomb's Mixture and use extensively anti-cholera vaccine.

Bilivaccine was also used extensively in many places in the Purdanishin-ladies as they preferred this to inoculation. Raw vegetables, raw fruits, sweetmeats, and export of fresh and salted fish from infected areas was prohibited. Supplementary instructions in dealing with cholera epidemic where medical aid was not available were issued to all the Collectors in Sind.

Forty thousand doses of anti-cholera vaccine were received from Kasuali during August and September 1929. 200 lbs. of potassium permanganate powder and 106,300 cholera pills were supplied to Inspectors of Sanitation and Vaccination, vaccinators and other various officers in Sind. Local Authorities either purchased the vaccine and drugs direct or were supplied by this Department, on requisition. All Inspectors of Sanitation and Vaccination and those vaccinators in whose

charge cholera was prevailing in Sind were put on cholera duty. The Inspectors were touring in the small municipal towns and helping the local authorities in adopting cholera preventive measures and the vaccinators were helping Medical Officers in carrying out inoculations. Some 5,000 doses of bacteriophage were distributed among the Civil Surgeons and Medical Officers, etc.

In all 118,689 inoculations were performed in Sind. About 19 Medical Officers on cholera duty were appointed in cholera affected places.

Next to Sind, the Western Registration District was badly affected. Compared to the year preceding the incidence of cholera for the year under report was high in East Khandesh, and low in other districts. The number of deaths was 2,576 against 1,963 in 1928. The death-rate was ·65 against ·49 in 1928 and ·36 the mean of previous five years. All the Collectorates except Kolaba were more or less affected to the extent of 46 registration circles with 360 villages. From January to June 1929, there was no cholera in East and West Khandesh districts. In Nasik District, there was one attack in March and 2 attacks and 2 deaths in April in Nandgaon Taluka and 22 attacks and 12 deaths in April and 2 attacks and 2 deaths in May in Nasik Taluka. In Thana District there was 1 attack and 1 death in North Salsette Taluka in May. In Bombay Suburban there were 3 attacks and 3 deaths in April in South Salsette Taluka. In Kolaba District there were two attacks in January in Karjat Taluka. The disease first appeared in the Western Registration District at Amalner on 9th July 1929 and in the long run all the talukas were affected. As usual, infection through rivers played an important part in the spread of the disease. Most of the infected villages are situated on the banks of the rivers. Travellers also carried the infection. In some cases indigestible food precipitated the disease.

In East Khandesh District the disease appeared in 13 rural and 10 town circles and was reported from 275 villages. Chopda Taluka recorded the highest death-rate of 6·46, Amalner 3·41 and Edlabad 2·93. Highest death-rates were recorded in Amalner Town (5·62), Erandol (6·01), Chopda (4·31) and Dharangaon (2·89). There were 5,821 attacks and 1,884 deaths or a percentage of deaths to attacks of 32·36. The disease prevailed in East Khandesh District from July to December 1929. In West Khandesh District, the disease appeared in 7 rural and 1 town circles and was reported from 68 villages. There were 899 attacks and 286 deaths or a percentage of deaths to attacks of 31·81. The disease prevailed in West Khandesh District from July to December 1929. In Nasik District, the disease appeared in 7 rural and 4 town circles and was reported from 622 villages. Malegaon and Baglan talukas returned death-rates of 1·97 and 1·40 respectively. Malegaon town reported the highest rate of 3·46. There were in all 1,008 attacks and 396 deaths or a percentage of deaths to attacks of 39·29. The disease prevailed in Nasik District in April, May and July to December. Thana and Bombay Suburban districts escaped very lighly reporting 8 attacks and 7 deaths and 3 attacks and 3 deaths respectively. In Kolaba District, there were only 2 attacks and no death.

In view of the prevalence of cholera at Banares and several other places in Northern India timely precautions were taken against out-breaks of the disease. Recommendations for adopting precautionary measures were sent up to the local bodies through the Collectors. They were warned against delaying reports of outbreaks. The Civil Surgeons in this Division were requested to direct the Medical Officers in charge of Dispensaries to take timely precautions, keep careful notes of the different treatments adopted, send their indents for anti-cholera vaccine and call meetings and explain to the public the way in which cholera is spread and how it could be checked.

Most of the local bodies carried out recommendations regarding sterilization of drinking water supplies and maintenance of stock of potassium permanganate powder and pills. Preventive measures were adopted and medical help was given as soon as the first attack of cholera was reported by wire or daily report.

During the year under report 10 Medical Officers were appointed on cholera duty—5 for East Khandesh, 3 for West Khandsh and 2 for Nasik District. The Inspector of Sanitation and Vaccination, East Khandesh, assisted chiefly the Medical Officers on cholera duty. The total number of anti-cholera inoculations in the Western Registration District was. 32,822. The total number of patients treated by doctors and others with various kinds of treatments was 2,848. Besides 1,861 persons were treated with Bilivaccine.

Central Registration District was very lightly affected with cholera only 45 deaths being reported against 4,404 in the previous year. Out of these 45 deaths, 32 were returned from Ahmednagar District. Four rural circles were affected. Shevgaon Taluka was the worst sufferer, no less than 97 attacks out of 109 were reported from this taluka, of whom 25 died. These 97 attacks were reported from five villages in this taluka. Five attacks and one death were reported from Poona District, of which Poona City reported two cases and one death and Poona Suburban three cases only. Sholapur District recorded seven cases and five deaths, Satara seven cases and six deaths and Ratnagiri only one case and one death. In April 1929 all Mamlatdars and Mahalkaries in the Central Division were asked to replenish their stock of potash permanganate and cholera treatments ; 309 lbs. of potash permanganate and 71,650 cholera treatments were supplied to all who wanted these drugs. During the year only one Medical Officer was appointed for Shevgaon Taluka in Ahmednagar District for a few days and he performed 132 cholera inoculations in addition to treating cholera patients.

Southern Registration District was practically free from cholera during the year under report, only 24 deaths were registered against 230 in the previous year. Out of the total deaths, 13 were reported from Honawar and Bhatkal rural circles in Kanara District—eleven in January and two in August. Only Belgaum and Bijapur town circles were affected and recorded three and one deaths respectively.

The Assistant Director of Public Health, Southern Registration District, paid special visits to Honawar and Bhatkal talukas and

suggested anti-cholera measures. These were attended to by the Collector, Mamlatdar and others in co-operation with the Civil Surgeon and the District Local Board. Gersappa village in Siddapur Taluka being one of the disseminating centres of infection from the Madras Presidency and the neighbouring Mysore Territory all travellers passing through this village of Gersappa were made to submit themselves for medical inspection and their belongings were disinfected by the Medical Officers appointed for the purpose. Eighty-nine anti-cholera inoculations were performed by the Dispensary Medical Officer, Bhatkal. As a result of these prompt measures, the epidemic in the Kanara District was completely stamped out. No further cases were reported after January 1929.

The Assistant Director of Public Health, Southern Registration District, remarks :—

"The disease in an epidemic form recurs at irregular intervals. In the previous nine big epidemics severity has been felt in the districts of Belgaum and Dharwar. It has been the experience in this Division that severe epidemics are generally preceded and followed by comparatively little prevalence of the disease. There has been a decrease in cholera mortality after the severe epidemic of the disease in 1927. There are signs of shortage of water-supply in towns like Hubli and Dharwar but fortunately the May showers have come in useful. As far as can be judged from Humidity figures available in this office up to February last, there seems to be no special apprehension of a severe epidemic in the Division during 1930."

Gujarat also was practically free from cholera—only 33 cases and 20 deaths were reported against 53 cases and 38 deaths in 1928. Out of the total number, 23 cases and 14 deaths were reported from Panch Mahals District, nine cases and five deaths from Ahmedabad and one case and one death from Surat District. Broach and Kaira districts were quite free from the disease. During the month of July 1929 one case and one death was reported by the Medical Officer of Health, Surat Municipality, who further stated that the case was imported from Cawnpore. Prompt measures were carried out and no more case occurred there. There were 23 cases and 14 deaths between 5th and 12th August 1929 in Goraj village of Halol R. C. in Panch Mahals District. The Medical Officer of Halol Dispensary and the Inspector of Sanitation and Vaccination visited the place. Reports received from them as well as from Mahalkari of the taluka showed that the origin of the disease could not be definitely traced out. Timely precautions were taken. No more cases occurred there. In Ahmedabad District Dascroi R. C. reported seven cases and four deaths, Dholka one case and one death and Ahmedabad City one case only.

46. *Preventive Measures.*—The usual precautionary measures against cholera were carried out in all the affected districts.

Inoculation.—During the year under report, 30 Medical Officers were appointed on cholera inoculation duty. Out of these, 10 were detailed for the Western Registration District (five for East Khandesh, three for West Khandesh and two for Nasik), one for Ahmednagar and 19 for the Sind Registration District.

The total number of persons inoculated against cholera during the year under report was 151,732. These were performed by the special

inoculators appointed for the purpose, Medical Officers in charge of hospitals and dispensaries and private practitioners and others. Out of the total number 151,732 inoculations 118,689 were done in Sind, and 32,822 in the Western Registration District. One hundred and thirty-two inoculations were performed in Ahmednagar and 89 in Kanara District.

Expenditure on cholera outbreaks.—During the year under report, a grant of Rs. 12,000 (reduced to Rs. 4,000 by a reappropriation of Rs. 8,000 for inoculation against plague, cholera, etc.) was sanctioned by Government for measures against outbreaks of cholera, e.g., supply of potash permanganate for disinfection of village water-supplies, cholera treatments and ingredients for Dr. Tomb's Mixture. Out of this sum Rs. 3,982 were spent.

In addition to the above, a total grant of Rs. 52,000 was sanctioned for inoculation against plague, cholera and other epidemics. Pay and travelling allowance of Medical Officers appointed for cholera and plague inoculation duty (Rs. 18,000) and the purchase of anti-cholera and plague vaccine (Rs. 34,000) are the two items of expenditure against the grant.

The late Dr. Munsiff paid two special visits to Sind, one in August and the other in December 1929, in connection with prevalence of cholera, floods and general health conditions in that Province. Prior to the outbreak of cholera in the Province, he issued a warning note against the danger of cholera entering Sind through the Punjab and the Assistant Director of Public Health, Sind Registration District, communicated it to all the local authorities.

The local authorities, it seems, failed to take a note or lesson from this and practically did nothing for its prevention with the result that cholera prevailed in an unprecedented epidemic form. Every attempt was, however, made by the Public Health Department to check its spread and the epidemic was brought under control.

He had to stay there for nearly two months and by minutely studying the situation he organised measures in all directions in co-operation with the local authorities, the Sind Relief Fund Committee and the Government officials. He visited nearly all the cholera and flood affected parts and organised campaigns against cholera and other diseases in both urban and rural areas. In each place visited he inspected the measures adopted by the local authorities to combat the disease and interviewed local officers and leading members of the local bodies. Every advice and help was given as regards preventive and curative measures. Cholera inoculation—a sure remedy against the disease—was pushed on.

In his comprehensive, thoughtful and very interesting reports to Government on the health conditions in Sind he has fully dealt with the situation there and has made several useful recommendations which if carried out will materially help in improving the conditions to a happy future.

Dysentery and Diarrhoea.

47. This heading shows an increase on the previous year's figures—25,108 deaths (13,120 males and 11,988 females) against 23,371 in 1928. The mean of the previous five years was 26,509 deaths. The death rate was 1·31 against 1·22 in 1928 and 1·38 the mean of the previous five years. When cholera is prevalent the figures under dysentery and diarrhoea show always an increase as the early and very late cases are registered under this heading specially in rural areas where diagnosis is not efficient.

The number of deaths registered under dysentery and diarrhoea in previous years is as follows :—

Year	Deaths	Year	Deaths
1901-1910 mean ..	52,919	1924	28,926
1911-1915 „ ..	39,455	1925	20,643
1916-1920 „ ..	34,156	1926	34,158
1921	26,799	1927	25,447
1922	21,118	1928	23,371
1923	22,238	1929	25,108

Central Registration District recorded the highest number of deaths—7,853 ; Southern 6,708 ; Western 5,627 ; Gujarat 2,686 ; and Sind 1,033 as compared with 7,730 ; 5,369 ; 5,711 ; 2,785 and 622, respectively, in 1928.

Bombay City recorded 1,201 deaths equal to a death rate of 1·05 as against 1,154 and 1·00, respectively, in 1928.

The urban death rate for the Presidency as a whole was 1·35 and the rural 1·30 against 1·28 and 1·20 respectively in 1928. The highest death rates for urban areas were recorded in Surat (3·79), Gokak (3·40), Pandharpur (3·06), Islampur (3·03), Bhiwandi (2·87), Erandol (2·72), Borsad (2·48), Karachi (2·46), Ashta (2·44), Rohri (2·37), Karwar (2·28) and Kurla (2·26).

48. *Dysentery.*—Under this sub-heading 3,967 deaths were registered against 3,867, the death rate being ·21 against ·20 in 1928. The urban death-rate was ·30 and the rural ·18 against the same rate respectively in the previous year. The highest death-rates for urban areas were recorded in Borsad (2·23), Mahad (2·22), Kurla (2·19) and Erandol (1·92). Dysentery in Sind was of the amoebic type on account of the floods polluting the water-supply.

49. Under Diarrhoea, 21,141 deaths were recorded against 19,504 in 1928. The death-rate was 1·10 against 1·02 in the previous year. The urban death-rate was 1·04 and the rural 1·12 as compared with ·99 and 1·02 respectively in 1928. The highest death-rates for urban areas were recorded in Gokak (3·20), Surat (3·15), Islampur (3·03), Phandharpur (2·86), Bhiwandi (2·79), Rohri (2·37), Ashta (2·33) and Poona City (2·12). The highest death-rates for rural areas were recorded in Belgaum (3·47), Sholapur (2·38), Satara (2·03), Bijapur (2·12), Bombay Suburban (1·86), Ahmednagar (1·81), Poona (1·61), Kolaba (1·50) and Kanara (1·45).

The Assistant Director of Public Health, Central Registration District, reports :—

" Amongst the urban circles, the highest death-rate from dysentery and diarrhoea was returned by Pandharpur town—3·06. Although the town has a pipe water-supply,

it still suffers from a high death-rate from this cause. On a representation made by the Assistant Director of Public Health, the Superintending Engineer, Public Health, informs that arrangements for chlorinating water permanently is in hand and necessary machines have been ordered from England. It is expected that with the installation of the chlorinating apparatus the death-rate from dysentery and diarrhoea will go down."

The Assistant Director of Public Health, Southern Registration District, remarks :—

"Gokak town of the Belgaum District and Bagalkot town of the Bijapur District returned the highest death-rates of 3·20 and 2·11 respectively, from this disease. It may be noted that greater parts of both these towns derive their water-supplies from the river and the use of polluted water can be taken as the chief cause of the high incidence of this disease in these towns."

The Assistant Director of Public Health, Sind Registration District, writes :—

"A warning note dealing with diseases, viz., Enteric fever, dysentery and diarrhoea, diseases of chest and malaria, which may possibly follow the floods was drawn by the Director of Public Health and copies were distributed in English and Sindhi among all the Local Authorities by the Assistant Director of Public Health. Five hundred copies in Sindhi were also supplied to the Chairman, Central Relief Committee, for distribution through his agents and arrangements were made for the publication of this note in all the leading English and vernacular Journals in Sind."

50. In Appendix II, a table is given showing the effect on the death-rate by the introduction of a piped water-supply. It will be noticed that the mean death-rate from cholera and dysentery and diarrhoea for the years succeeding installations of water works ending with the year under report shows great improvement over that for the quinquennial mean preceding the introduction of a piped water-supply in practically all the towns.

Plague.

51. In the year 1929 there was an increase in mortality from plague as compared with the previous year. Since 1918 there has been a big drop in the annual mortality. A return in 1923 to the high rate common before the great war was followed by a fall in 1924 and also in the years following till 1928 and even in 1929 with slight variations. During the year under report 18,014 deaths were registered equal to a death-rate of ·94 as contrasted with 13,563 and a death-rate of ·71 in 1928 and ·51 the quinquennial mean.

The total number of deaths recorded in each year since 1903 is given below :—

Year	Number of deaths	Year	Number of deaths
1903	281,269	1916	79,507
1904	223,957	1917	162,874
1905	71,363	1918	79,478
1906	51,525	1919	9,626
1907	93,609	1920	13,857
1908	27,345	1921	4,672
1909	24,316	1922	8,379
1910	25,043	1923	33,741
1911	100,399	1924	9,214
1912	28,984	1925	12,601
1913	25,288	1926	9,866
1914	20,060	1927	4,076
1915	43,824	1928	13,563
		1929	18,014

The distribution of plague given in Annual Form No. XII shows that the worst affected district was Dharwar with 5,541 deaths or a ratio of 5·35 per 1,000 of population. Next comes Satara with 4,875 deaths equal to a death-rate of 4·76. Other badly affected districts were Belgaum 3,576 deaths or a death rate of 3·77; Sholapur 1,634 (2·20); Nasik 1,425 (1·73); Bijapur recorded 300 deaths while Nasik and Kanara, 140 and 132 deaths respectively; 92 deaths were reported from Surat and 80 from Ratnagiri. Gujarat (with the exception of Surat) and Sind escaped entirely. East Khandesh was quite free while West Khandesh, Bombay Suburban and Ahmednagar were practically free and Kolaba District returned 28 deaths. Bombay City recorded 29 deaths from plague against 257 in the previous year.

The highest death rates for urban areas were recorded in Malegaon (33·70), Navalgund (32·30), Belgaum (9·03), Barsi (8·02), Dharwar (3·85), Nipani (3·62), Nasik (3·51), Bagalkot (3·24), Gadag Bettigeri (2·79), Chiplun (2·64), Wai (2·45), Vengurla (2·44), and Gokak (2·20).

52. By Registration Districts, their history is as follows :—

The heaviest mortality occured in the Southern Registration District, 9,549 deaths being recorded against 3,288 in 1928. The death-rate was 3·00 as compared with 1·03 in the preceding year and a quinquennial mean of 1·20. Of the total number of deaths, 4,244 were males and 5,305 females against 1,472 and 1,816 respectively in 1928. The death-rates in urban and rural areas were 2·79 and 3·03 respectively. The chief areas of mortality were Dharwar and Belgaum districts which contributed 5,007 and 3,164 deaths respectively or 86 per cent. of the total number of deaths from the disease in the Division. The epidemic was prevalent throughout the year in the Division, the highest mortality being recorded in the month of October and the lowest in May.

The districts of Bijapur and Kanara escaped lightly returning 300 and 132 deaths respectively. Of the 62 circles in the Division, 52 were infected. Out of 4,738 villages, 521 were infected. All rural circles in the Belgaum and Dharwar districts were affected. In Bijapur District all rural circles except Hungund, Bijapur and Indi and in Kanara all rural circles with the exception of Siddapur, Bhatkal and Honawar were affected. Navalgund Taluka of the Dharwar District and Chikodi of Belgaum, Muddebihal of Bijapur and Sirsi of Kanara District recorded the highest number of deaths, 1,465, 1,402, 128 and 62 respectively. In Belgaum District the rural circles of Belgaum, Hukeri and Sampgaon suffered heavily and recorded high death-rates of 11·50, 8·40 and 5·73 respectively. In the Dharwar District the rural circles of Navalgund, Nargund, Gadag, Hubli and Kalghatgi were the worst infected returning death-rates of 21·69, 17·38, 9·24, 8·32 and 7·50 respectively. Among the town circles Belgaum and Navalgund were the worst affected returning the high death-rates of 9·03 and 32·30 respectively. The mortality curve which had taken a downward course since October 1928 reached its lowest point in the month of May 1929 and after taking an upward course since June reached its maximum in October 1929.

Inoculation was the only measure that was popular among the public and many people came forward for inoculation of their own accord without any opposition from any quarter. Four special Inoculators in Belgaum and four in the Dharwar District were working during the year. In addition to these special inoculators, inoculation work was carried on by the Dispensary Medical Officers. Co-operation of local private medical practitioners was also secured for doing this work both in the Municipal and rural areas, offering them some honorarium. The Belgaum District Local Board secured the services of the medical officer in charge of the Indian Red Cross travelling Dispensary and also of two Missionary ladies for this work. Sufficient stock of anti-plague vaccine was kept in the office of the District Local Board ready for despatch immediately on receipt of intimation from the inoculators or private medical practitioners. Epidemic in Belgaum town was very severe and two special inoculators worked there, one of them being lent by the Director of Public Health, as a special case. An emergency stock of anti-plague vaccine was also maintained in the office of the Assistant Director of Public Health, to meet urgent demands. Evacuation and systematic rat destruction were also resorted to by the public and the local bodies in some cases. In Ankola and Karwar towns epidemic being severe in January 1929 the Inspector of Sanitation and Vaccination visited the places and helped the Municipal staff and advised them regarding baiting and trapping of rats. The Assistant Director of Public Health paid special visits to Dharwar, Hubli, Navalgund, Nipani and Sankeshwar with the Director of Public Health and advised anti-plague measures. The Assistant Director of Public Health interviewed the Collectors of Belgaum and Dharwar and also the Commissioner, Southern Division, and discussed with them the situation in their respective districts. The Assistant Director of Public Health arranged for magic lantern demonstration on plague at Sankeshwar in Hukeri Taluka of the Belgaum District with a view to prevent infection being carried over from place to place. The weekly bazaar at Nipani, Athni and Saundatti towns were shifted outside the municipal limits. In many places the Assistant Director of Public Health convened informal meetings of Municipal Councillors and local medical practitioners and explained to them necessary anti-plague measures to be adopted. 231,694 plague inoculations were performed during the year under report as per information received in Assistant Director's office through all different agencies. Out of these, 60,827 were done in Belgaum District, 142,160 in Dharwar, 20,816 in Bijapur and 7,891 in Kanara District. Of the total number of inoculations, 37,236, 18,240 and 2,220 were performed by the special plague inoculators appointed in the districts of Dharwar, Belgaum and Bijapur, respectively, and 20,838 were done by the District Local Board inoculator of the Dharwar District, and the remaining by the medical officers in charge of hospitals and Dispensaries and private medical practitioners. Of the eight inoculators appointed by the Director of Public Health, four were working in the Dharwar District under the Collector and the other four in Belgaum District under the Assistant Director of Public Health.

Ratting operations were carried on by the following municipalities during the year for the periods mentioned against each and the results are tabulated in the following statement :—

Ratting operations carried on in the Southern Registration District during 1929.

Name of place.	Population.	Period of trapping. From	To	Daily average of traps.
Belgaum ..	36,214	Whole year.		701
Nipani ..	11,878	1st September 1929.	31st December 1929.	119
Haliyal ..	4,455	4th October 1929.	31st December 1929.	47
Hubli ..	69,140	Whole year.		300
Bijapur ..	32,471	22nd September 1929.	31st December 1929.	180
Dharwar ..	34,327	1st February 1929.	31st December 1929.	99
Gadag ..	41,158	15th August 1929.	31st December 1929.	245

Name of place.	Caught.	Examined.	Infected.	Killed.	Remarks.
Belgaum ..	42,357	20,146	2	42,357	
Nipani ..	14,344	32	..	14,344	
Haliyal ..	2,276	....	..	2,276	
Hubli ..	89,772	....	..	89,772	
Bijapur ..	8,169	120	3	8,169	
Dharwar ..	21,600	....	..	21,600	
Gadag ..	16,423	....	..	16,423	

These operations were carried out throughout the year in the town circles on Belgaum and Hubli and in Dharwar town for 11 months. In others the operations were carried on when the epidemic actually prevailed.

Printed leaflets in vernacular giving details of instructions regarding preventive measures to be taken were distributed to the village officers and Mamlatdars soon after the receipt of intimation of an outbreak from a village.

Next to Southern the Central Registration District was badly affected, 6,746 deaths being recorded against 8,363 in 1928, the death rate was 1·46 against 1·81 in the previous year. During 1928, out of 8,363 deaths from plague in the whole Central Registration District, 8,239 occurred in Satara District alone. In 1929 out of 6,746, 4,875 occurred in Satara District. The next badly affected District was Sholapur, where 1,634 deaths occurred.

In Satara District, the highest number of deaths (997) was recorded in the month of January 1929, and the epidemic became milder during the following months till the lowest point (16) was reached in June. From July the epidemic again assumed a graver form till the highest point was reached in October when 749 deaths were returned from this District. The epidemic again died down in November and December when 236 deaths only were returned. It will thus be seen that the epidemic shows two peaks, one in January and one in October 1929.

In Satara District, plague was prevalent in 332 villages and towns out of the total of 1,341. The only rural circle which was free from plague was Shirala Peta. As is usually the case in plague epidemic more females have died than males, e.g., in this district 2,738 females have died as against 2,137 males. The largest number of deaths occurred in Karad Rural Circle where 605 females and 482 males died. Satara Rural Circle returned 1,053 deaths of whom 603 were females and 450 males. Koregaon Taluka returned 737 deaths of whom 423 were females and 314 males. Of the town circles, Wai returned the largest number of deaths, viz., 25 of which 13 were males and 12 females. Karad town had 17 deaths; Ashta and Islampur had 4 and 1 death, respectively. In the Sholapur District the largest number of deaths were returned by Barsi Rural Circle. Out of 1,022 deaths, 558 were females and 464 males. The next rural circle to return the largest number of deaths was Madha which had 365 deaths of whom 217 were females and 148 males. The only taluka which was free from plague was Pandharpur including Pandharpur town. Barsi town had 177 deaths while Sholapur had only 4 deaths. Sangola and Malsiras talukas were very lightly affected. In Poona District only two rural circles were affected, viz., Purandhar and Bhimthadi. There were 105 deaths in the latter and 13 in the former. Only two town circles were affected, viz., Poona and Baramati. Poona returned 23 deaths and Baramati 13 deaths. Only one case was reported from Poona Cantonment in November. In Ratnagiri District, Vengurla was the only town which returned cases and deaths throughout the year except in the months of June and September. Total number of deaths in this town was 46. In Chiplun town the disease was prevalent in the months of October, November and December and 29 deaths were recorded. Sangameshwar Taluka reported 5 deaths.

Ratting operations :—

Information about ratting operations undertaken by Municipalities in Central Registration District during the year 1929.

Name of Municipality.	Date of commencement of operations.	Date of cessation.	The daily average number of traps used.	Number of rats caught.
Poona City ..	During the whole year.		600	46,256
Mhaswad	11th September 1929.	Till the end of the year.	30	642
Satara Suburban ..	During the whole year.		100	3,189
Sholapur	Throughout the year.		725	83,192
Panchgani	Do.		75	3,027
Pandharpur ..	Do.		150	31,320
Wai	5th August 1929.	31st December 1929.	100	2,939
Satara City	Throughout the year.		250	14,062
Chiplun	....	....	....	3,000*
Ratnagiri	From last week of November to the end of December 1929.		....	....

Name of Municipality.	Number of rats examined.	Number of rats infected.	Remarks.
Poona City ..	36	....	A special staff in addition to permanent staff was engaged on 23rd September 1929 and it was continued till the end of the year.
Mhaswad	642	....	
Satara Suburban ..	4	4	
Sholapur	40	....	
Panchgani	....	....	
Pandharpur ..	Splenic succars of four rats were sent to Bombay for examination but none were found infected.		
Wai	....	....	
Satara City	10	....	
Chiplun	....	....	*Caught and burned. As regards other details, no record was kept and hence cannot be supplied.
Ratnagiri	....	....	

It will be seen from the statement that a total number of 187,627 rats were caught in 10 towns. The largest number of rats (83,192) were caught in Sholapur City.

48,097 persons were inoculated during the year, the largest number being in Satara District where 26,123 inoculations were performed. Sholapur District recorded 9,639 inoculations, Ratnagiri 9,471 and Poona 2,864. Eight inoculators were employed during the year in the Central Registration District. Plague inoculations were also performed by the taluka dispensary officers to whom outfits and vaccine were supplied.

The Assistant Director of Public Health, Central Registration District, addressed Collectors of the Districts in his Division in which plague was prevalent to adopt measures for prevention of the spread of plague. The Collectors were also asked to appoint the Mamlatdars and Mahalkaries as special plague officers as per Government Resolution, General Department, No. 2293 of 18th March 1919, and they were asked to recover the cost of the above expenditure from local bodies as per Government Resolution, General Department, No. 19 of 22nd November 1927. Accordingly the local boards of Sholapur and Satara made the necessary provision for expenditure and special plague officers were appointed by the Collectors. In the Poona District the Collector carried out the instructions in the Bhimthadi Taluka. In the Ratnagiri District, the Collector issued instructions to all officers and the public on the preventive measures as suggested by the Public Health Department. Special precautionary measures were taken for Barsi town by the Municipality under the advice of the Assistant Director of Public Health and they also appointed an experienced inspector to carry them out.

Plague broke out in Mahableshwar in the month of February and cases occurred till the end of April 1929. Altogether 7 cases and 4 deaths were reported from Malcolmpeth. The Assistant Director of Public Health, Central Registration District, was specially deputed to carry out necessary preventive measures and the following measures were adopted :—

(1) An intensive rat campaign was inaugurated consisting of trapping, baiting and use of cynogas under a special staff.

(2) Exposure of grain for defleaing. Grain was exposed to the sun at the following sites :—(*a*) Near the lake for Panchgani road, (*b*) at Machutar for the old Satara road, (*c*) below park hall on the Mahad road.

(3) Removal of the bazaar opposite to the Hirda Depôt.

(4) Daily house to house visit for detecting plague cases and other illnesses.

(5) Improvement of conservancy.

(6) Rewards for finding out dead rats.

(7) Examination of dead rats.

(8) Disinfection of all plague-infected houses, hotels, etc.

(9) Compulsory notification.

(10) Layout of the camp for people who have evacuated and its general supervision under a temporary Superintendent.

(11) Over 3,134 persons were inoculated.

(12) Removal of all suspected cases of plague to the Infectious Diseases Hospital. An additional temporary shed was also erected between Yenna Lake and Hirda Depôt and equipped as an expansion in case of need to Infectious Diseases Hospital.

Next to Central, Western Registration District was badly affected, resulting in 1,597 deaths against 1,067 in 1928. Nasik District was the worst affected recording 1,425 deaths against 788 in 1928, 14 registration circles with 57 villages were infected. Thana District recorded 140 deaths against 124 in 1928. Eight registration circles were affected with 22 villages, 28 deaths were reported from Kolaba against 130 in the previous year. West Khandesh and Bombay Suburban Districts recorded 3 and 1 death respectively. In Nasik District plague was prevalent from January to April and July to December. Thana District was affected throughout the year. In Kolaba District the disease prevailed in January, February and April to July. Among town circles Malegaon was Worst affected, 799 deaths were recorded equal to a death-rate of 33·70. Nasik town recorded a death-rate of 3·51.

Ratting operations were carried out at Nasik, Malegaon and Dhulia towns, the details of which are given below :—

Anti-Plague measures adopted in the Western Registration District during the year 1929

Name of Place	Date of commencement	Date of cessation	Daily average Number of traps used
Nasik	1st January 1929	31st December 1929.	400
Malegaon	1st January 1929	31st December 1929.	144
Dhulia	1st January 1929 18th August 1929.	30th March 1929 31st December 1929.	400

Name of Place	Number of rats caught	Number of rats examined	Number of rats found infected	Number of poison baits distributed
Nasik	35,804	44	21	372,312
Malegaon	19,399	5	1	....
Dhulia	53,125	4	....	....

In the Gujarat Registration District, Surat was the only district that was affected with plague during the year under report. In all there were 160 cases and 92 deaths in 1929 against 843 cases and 588 deaths in 1928. Four talukas with 13 villages were affected. The epidemic

was prevalent from January to April 1929. All the town circles were free from the disease. Plague made its first appearance in Gujarat in July 1927 in Bhadeli Jaga Lala village of Bulsar taluka, Surat District, where infection was most probably imported by a *machhi* (a sailor) from Mahuva where he had ferried his boat. Plague continued throughout the whole year of 1928 and in the year under report from January to April 1929.

One special medical officer on plague inoculation duty was appointed in the second week of March 1929 by the Surgeon General with the Government of Bombay in Dangs (Dungarda Station) at the request of the Civil Surgeon, Surat, on receipt of a report of an outbreak of plague at that station. Only 4 inoculations were done by him and he stated that as the people in Dangs are mostly uncivilised and illiterate, he could not get more persons to inoculate.

Only 203 inoculations were done in Surat District. Sind Province was entirely free from plague as was the case last year. Regular ratting campaign was undertaken by the municipalities of Karachi, Hyderabad, Larkana, Mirpurkhas and Tando Adam. The number of rats caught in these towns totalled 130,844 as against 145,252 in the preceding year.

In Bombay City 29 deaths were recorded against 257 in 1928. The death-rate was ·02 against ·22 in the preceding year.

Ratting operations.—In Bombay City a determined rat campaign was carried out 637,978 rats were caught and destroyed. Out of that 264,509 were examined and 512 found to be plague infected. The daily average number of traps used was 634.

53. *Anti-plague measures.*—During the year under report 24 medical officers were appointed on plague inoculation duty. Out of these 11 were detailed for the Central Registration District (6 for Satara, 4 for Sholapur and 1 for Poona), 11 for the Southern (6 for Dharwar and 5 for Belgaum) and 2 for the Western Registration District (Nasik).

Inoculation.—The total number of persons inoculated during the year under report was 423,260 as compared with 132,340 in the previous year. These were performed by the special inoculators appointed for the purpose, medical officers in charge of hospitals and dispensaries and private practitioners and others. Out of these 295,544 were performed in British territory and 127,716 in Native States.

The total number of persons inoculated in each year since 1914 is given below:—

Year	Number of inoculations	Year	Number of inoculations
1914 ..	62,497	1923 ..	145,395
1915 ..	128,800	1924 ..	60,327
1916 ..	211,907	1925 ..	60,831
1917 ..	241,139	1926 ..	84,900
1918 ..	36,571	1927 ..	56,171
1919 ..	28,307	1928 ..	132,340
1920 ..	49,117	1929 ..	423,260
1921 ..	39,208		
1922 ..	73,098		

From the information available in this office, 237 cases of plague amongst persons inoculated were reported of which 72 died during the year under report. Out of these 237 cases, 82 were attacked within 10 days of inoculation, of whom 36 died : while the remaining 155 were attacked after the expiry of the incubation period, i. e., after ten days of inoculation, of whom 36 died.

By districts, the number of operations was 142,160 in Dharwar, 60,827 in Belgaum, 26,123 in Satara, 20,816 in Bijapur, 12,098 in Nasik, 9,639 in Sholapur, 9,471 in Ratnagiri, 7,891 in Kanara, 2,864 in Poona, and 885 in Thana.

In Bombay City, 436 inoculations were performed, 113,666 in Kolhapur and Southern Maratha Country States, and 7,090 in Phaltan State 2,110 inoculations were performed in Jails and Prisons.

Small-pox.

54. The small-pox epidemic of 1929 has been the severest since 1905, with the exception of 1924 when the epidemic resulted in over 11,000 deaths. The total deaths recorded during the year under report numbered 10,635 (5,413 males and 5,222 females) against 5,265 in the previous year and 6,215 the mean of previous five years. The death-rate was ·56 per mille of population against ·27 in 1928 and ·32 the quinquennial mean. The urban death-rate was ·87 and the rural ·48.

The annual mortality for previous years is given in the following table :—

Year	Number of deaths
1901-10 mean	4,962
1911-1920 mean	5,074
1921	1,771
1922	1,170
1923	2,811
1924	11,152
1925	5,644
1926	3,922
1927	5,091
1928	5,265
1929	10,635

Distribution.—Detailed figures are given in Annual Form No. VIII.

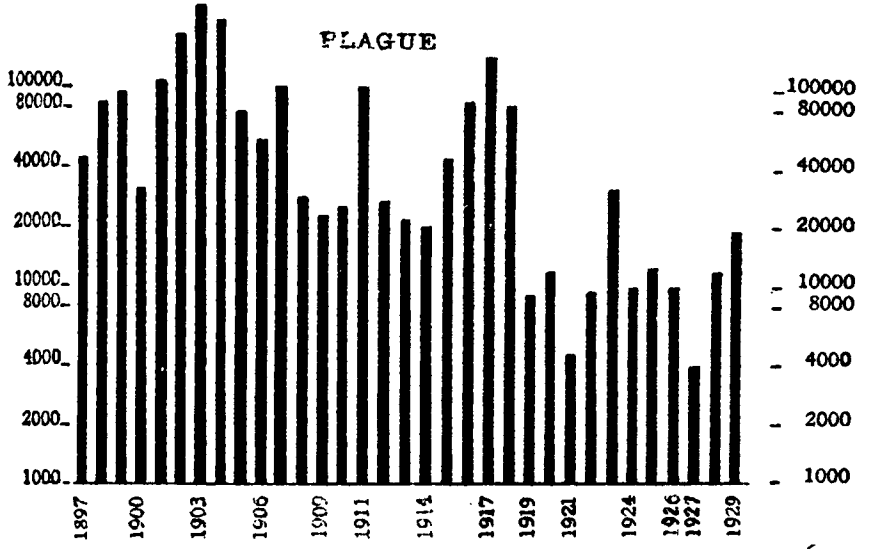
While all the Collectorates were infected, the following suffered heavily :—East Khandesh reported 2,027 deaths or a ratio of (1·88), West Khandesh 1,373 (2·24), Nasik 762 (·92), Thana 514 (·68), Kolaba 396 (·70), Ahmedabad 582 (·66), Karachi 390 (·73), Poona 609 (·62), Bombay Suburban 72 (·48), Dharwar 452 (·44), Surat 282 (·42), Ratnagiri 426 (·37), Ahmednagar 283 (·39), Kaira 224 (·31) and Belgaum 220 (·23).

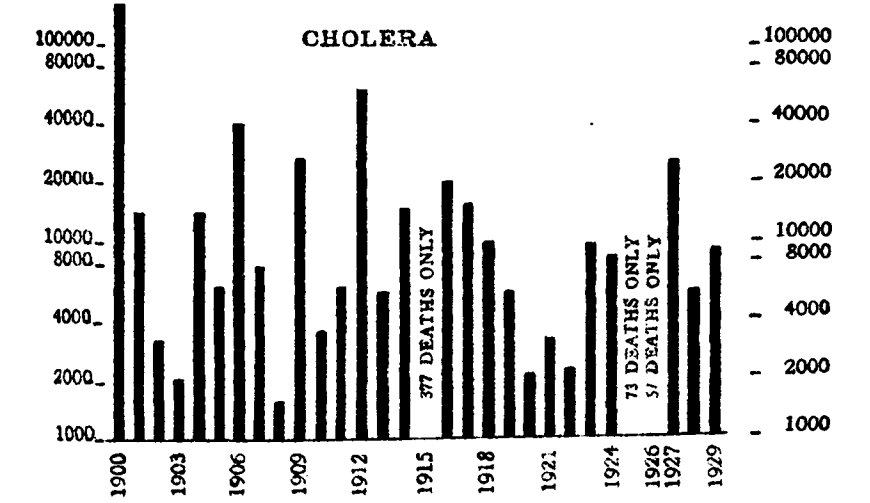
Bombay City shows a considerable increase in mortality from small-pox. 1,126 deaths were registered against 595 in 1928. The death-rate was ·98 per 1,000 of population as against ·52 in 1928 and ·65 the quinquennial mean.

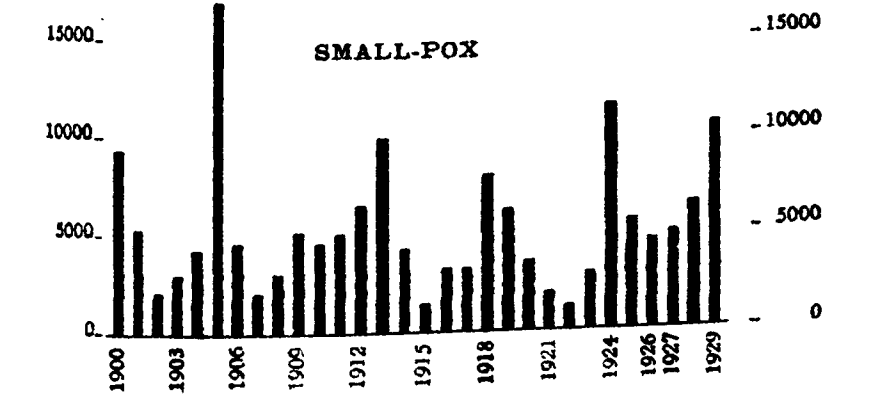
CHART IV

ANNUAL INCIDENCE OF DEATHS FROM EPIDEMIC DISEASES

Scale figures represent actual deaths for Plague and Cholera. Figures are at their log : intervals and only those above 1000 are shown.







266 registration circles with 2,186 villages were infected.

The highest urban death-rates were recorded in Mahad (7·79), Tatta (5·78), Jalgaon (5·21), Amalner (4·57), Nadiad (3·60), Malegaon (3·58), Ranebennur (3·02), Poona City (2·52), Dakore (2·26), Surat (1·78), Chalisgaon (1·75), Mehmedabad (1·60), Nasik (1·55), Karachi (1·55) and Panwel (1·50).

Of the 10,635 deaths from small-pox, 3,176 were of infants under one year and 5,593 of children between one and ten years of age.

63 per cent. of the mortality occurred during the first six months of the year. December was the month of greatest severity 1,681 deaths having been recorded. Small-pox year normally begins about October-November and reaches its full in March or April and then declines. It was obvious, therefore, that the high mortality in December only indicated that the full force of the epidemic was yet to come and this has proved to be the case in the returns for the early half of 1930. Thus, the year 1930 will be the worst small-pox year.

55. The following is a short summary for each Registration District:—

The heaviest incidence occurred in Western Registration District with 5,144 deaths; Central 1,595; Gujarat 1,171; Southern 852 and Sind 747 deaths as compared in that order with 1,815; 1,726; 102; 848 and 179 in 1928.

In the Western Registration District there were 5,144 deaths from small-pox against 1,815 in 1928 and 1,867 the mean of previous five years. The death-rate was 1·29 against ·46 in 1928 and ·49 the quinquennial mean. Out of 89 registration circles, 78 were infected, while out of 7,501 villages, 1,163 reported deaths. East Khandesh, West Khandesh and Nasik Districts were badly affected. Of 5,144 deaths, 1,748 were under one year and 2,989 between one and ten years of age. December recorded the highest number of deaths. Vaccination campaigns were carried out in several affected places.

In the Central Registration District, there were 8,422 attacks and 1,595 deaths from small-pox against 8,198 and 1,726 respectively in 1928. Out of 78 registration circles, 62 were affected. Deaths were reported from 456 villages. The highest mortality was recorded in December. Of the 1,595 deaths from small-pox 429 or 27 per cent. have occurred among infants under one year of age and 786 or nearly 50 per cent. have occurred between one and ten years of age and the remaining 380 or 23 per cent. above ten years of age. In Ahmednagar District, 97 villages were infected and 1,632 attacks and 283 deaths were reported. In Poona District, out of 1,157 villages 118 were infected. There were 2,611 attacks and 609 deaths. Poona City recorded 335 deaths equal to a death-rate of 2·52. In Sholapur District 56 villages were affected and returned 840 attacks and 123 deaths. In Satara District, out of 18 registration circles, 13 were infected and 56 villages reported deaths. There were 823 attacks and 154 deaths against 1,192 and 308 in 1928. In Ratnagiri District, out of 15 registration circles, 11 were infected while

129 villages reported deaths. There were 2,516 attacks and 426 deaths against 1,658 and 238 respectively in 1928.

Precautionary Measures.—A pamphlet on small-pox and its prevention written by Dr. Shiveshwarkar, Assistant Director of Public Health, Central Registration District, for the guidance of village officers, Mamlatdars and house-holders, was published by Government and copies distributed freely throughout.

The Poona City Municipality appointed a special vaccinator during December at the instance of the Assistant Director of Public Health, Central Registration District. The Assistant Director also wrote a pamphlet and prepared a plan of campaign.

Small-pox was not more than last year in Southern Registration District. 852 deaths were recorded as against 848 in the last year and the death-ratio being the same ·27 in the year 1929 and 1928 as compared with a quinquennial mean of 1·20. The mortality which showed a gradual increase since November 1928 reached its highest point in the month of February 1929 and registered 128 deaths and then showed a steady decrease except a slight rise in July until it reached its lowest point in the month of October recording 18 deaths. There was again a slight increase in November and December. Of the total deaths (852) 233 were among infants under one year and 335 under ten years. Out of the total number of 852 deaths, 783 were from rural circles and the remaining 69 from the urban areas. 43 out of the total registration circles of 62 and 295 villages out of 4,738 villages in the Southern Registration District were affected with small-pox as compared to 44 and 291 respectively in the preceding year.

The highest mortality of 452 was recorded in the Dharwar District. All rural circles except Mundargi and Gadag-Bettigeri and Ranebennur town circles were affected. Ranebennur and Kod rural circles were the worst affected. Gadag-Bettigeri town returned the highest ratio of 3·02 in the Division. In the Belgaum District all rural circles except Chandgad and 78 out of a total number of 1,069 villages were infected recording a total number of 220 deaths. All town circles were free. The rural circles of Parasgad, Gokak and Athani recorded the highest mortality rates of ·46, ·43, and ·40, respectively. 158 deaths were registered with a ratio of ·20 in the Bijapur District. All rural circles and all town circles except Ilkal were affected. The high death-rates of ·54, ·34 and ·31 were recorded in Bilgi, Badami and Sindgi rural circles. Kanara District escaped very lightly recording 22 deaths only 6 out of 11 rural circles were infected. The highest death-rate of ·32 was reported from Bhatkal rural circle. All town circles were free.

The epidemic in Garag village of the Dharwar Taluka was severe in January and February. The Inspector of Sanitation and Vaccination was asked to investigate into the vaccinal state of the attacked. The average age of the vaccinated persons attacked was 17 against 6 for unvaccinated. As the epidemic was severe, the fair due at this place from 18th to 27th February was curtailed and permission was given to hold

the fair for one day only as advised by the Assistant Director of Public Health. Inspector of Sanitation and Vaccination and vaccinator were ordered to camp at this place and one extra candidate vaccinator was sent there to assist the vaccinator in carrying out vaccination work with the result that the fair passed off without giving rise to an increase of the disease. The Assistant Director of Public Health, during the course of his tour, visited small-pox affected areas and advised people to get themselves vaccinated.

In the Gujarat Registration District, 1,171 deaths from small-pox were registered against 102 in 1928. In Surat District 8 out of 9 rural circles were affected. Out of a total number of 282 deaths in Surat District, Surat City alone reported 209 deaths during the year under report against 3 in 1928. Broach District was very lightly affected, recording 16 deaths against 18 in 1928. Four rural circles out of 6 were affected. Kaira District reported 224 deaths against 1 death only in 1928. Nadiad town alone reported 115 deaths while Kapadvanj and Borsad reported 18 and 17 deaths respectively. In Panch Mahals District 67 deaths were reported against 6 in 1928. Godhra town reported 17 deaths and 4 rural circles out of 5 reported 50 deaths. Infection in Ahmedabad District resulted in 585 deaths against 37 in 1928. Ahmedabad City reported 254 deaths against 7 in 1928. All the rural circles were infected and reported 292 deaths.

In Sind, 2,671 cases with 747 deaths were registered against 1,028 cases with 179 deaths in the preceding year. The worst sufferer was Karachi District recording 1,078 cases with 390 deaths. Of 747 deaths from small-pox, 190 were among infants under one year, 353 between one and ten years and the remaining 204 above 10 years. Of 5,134 towns and villages in Sind, 113 were affected by small-pox.

In Karachi City, small-pox was prevalent throughout the year under report. No death was reported in November. In all 739 cases and 309 deaths were reported as against 11 cases resulting in four deaths in the preceding year. The Health Officer, Karachi Municipality, reported in January 1929 that small-pox was prevalent more amongst the Kutchi immigrated from Cutch and Dwarka and such other places. It was also more prevalent among the unvaccinated than among the vaccinated. A special karkoon and four extra vaccinators were appointed to make house to house enquiries and to vaccinate the unprotected children on the spot. Schools were examined to find out the unprotected children and notices were served on the parents to get their children vaccinated. The origin of the present outbreak as reported by the Health Officer, was due to an imported case of small-pox coming from Shivnathji who developed the disease a month ago in the Railway train while on his way to Karachi and was given a shelter in Jail quarter where he later on infected other children in the same house who were unprotected. Another small-pox case was imported from Assam which was detected. Children from the infected houses were prevented from attending schools. Unfortunately owing to the epidemic of measles among children it was not possible to carry on vigorously the campaign against small-pox as majority

of children were not in a fit condition to be vaccinated. Again in May 1929 the Health Officer reported that the present epidemic confined itself at first to Jail and market quarters which were thickly populated with Kutchis and other Hindus who have strong aversion to vaccination. Subsequently, the epidemic spread in other quarters. The steps taken by the Health Authorities to control the disease were prompt. Patients, where possible, were removed to the Infectious Diseases Hospital. Contacts were traced and vaccinated. All the resources of the Karachi Municipal Health Department were utilized to control the spread of the disease. Special vaccination stations were opened in different parts of the City. Out of the total of 309 deaths from small-pox in Karachi City, 17 were among vaccinated and 252 were among unvaccinated the percentage of deaths among the vaccinated and unvaccinated being 11 and 46 per cent. respectively. In Hyderabad town, small-pox broke out in February 1929 and continued throughout the year. In all 67 cases and 24 deaths were reported against 20 cases and 7 deaths in 1928 and 31 cases and 9 deaths in 1927. In Larkana town, small-pox appeared on 10th June 1929 and disappeared on 11th September 1929 and reappeared on 11th November 1929 and disappeared on 27th December 1929. There were in all 22 cases and 8 deaths. In Sukkur town, small-pox broke out in February and continued up to the end of the year. In all 83 cases and 26 deaths were reported. In Shikarpur town 147 cases and 21 deaths were reported. All the cases and deaths were among unvaccinated. Small-pox appeared in Tatta town on 10th December 1928 and continued up to 10th August 1929 and reappeared in December 1929. Out of 135 attacks, only seven cases with no death occurred among the vaccinated. Out of 128 cases among the unvaccinated, 51 died.

In Sind, the Officers of this Department enquired into the vaccinal state of 2,824 cases of small-pox with the following results :—

Out of 396 cases which occurred in the population below one year of age, 37 were among vaccinated and 359 among unvaccinated and in the population over one year and below 14 years of age, out of 1,833, 462 were among vaccinated and 1,371 among unvaccinated persons. In the population over 14 years of age out of 595, 310 were among vaccinated and 285 among unvaccinated. Out of the total of 809 cases among vaccinated only 69 died whereas among the unvaccinated out of 2,015, 537 died ; the percentage of deaths among vaccinated and unvaccinated being 9 and 27 per cent. respectively.

56. In accordance with Government Resolution, General Department, No. P-61, dated the 29th January 1926, the following short summary of small-pox cases treated at the various hospitals in the Presidency is given :—

During the year under report 322 cases of small-pox were treated at the Civil Hospitals and Epidemic Diseases Hospitals in the Presidency as against 70 in the previous year. Of the cases treated, 153 had been vaccinated as against 28 in the previous year while 16 as against 3 in the previous year were stated to have been successfully vaccinated but no vaccination cicatrix could be seen. 149 cases were unvaccinated as for

39 in the year previous. The Epidemic Diseases Hospital, Karachi, treated the largest number,—164 as against 5 in the previous year; next comes the Infectious Diseases Hospital at Poona which treated 93 cases.

Injuries.

57. There were 8,277 deaths recorded from Injuries of which 4,708 were among males and 3,569 among females. The number registered in 1928 was 7,959 while the quinquennial mean was 7,726.

The annual mortality for previous years under this heading is as follows:—

Year	Number of deaths
1901-1910 mean	6,879
1911-1920 ,, ...	7,725
1921	7,888
1922	7,810
1923	7,514
1924	7,374
1925	7,754
1926	7,672
1927	7,873
1928	7,959
1929	8,277

From the above table it will be seen that this definite cause of death which is free from most errors of registration, varies but little from year to year.

58. Further comparisons arranged under the various heads are set forth in the following table:—

	1929			1928		
	Male	Female	Total	Male	Female	Total
Drowning	1,137	1,696	2,833	1,197	1,718	2,915
Poisoning	136	58	194	137	45	182
Hanging	179	85	264	174	66	240
Wounding	1,306	548	1,854	1,292	556	1,848
Wild Beasts	31	5	36	33	9	42
Snake-bite	930	584	1,514	933	514	1,447
Rabies	109	57	166	122	74	196
Railway Accidents ..	88	22	110	92	16	108
Other Causes	792	514	1,306	542	439	981
Total ..	4,708	3,569	8,277	4,522	3,437	7,959

The increase in deaths by other causes as compared to previous year is due to inclusion of casualties (209) during the riot in Bombay City.

59. *Snake-bite Deaths.*—1,514 deaths were attributed to snake-bite against 1,447 in 1928. The highest number occurred in Ratnagiri District, viz., 297 against 214 in 1928. Next in order were Thana 180, Satara

105, Ahmedabad 70, Kolaba 64, Panch Mahals 61, Kaira 59 and Thar and Parkar 57. Ratnagiri, Thana, Satara, Ahmedabad, Kolaba, Kaira and Thar and Parkar also headed the list last year. In the Southern Registration District, 148 deaths from snake-bite were reported during the year under report. 92 of these were males and 56 females. 123 deaths were enquired into. In 43 cases the snake was identified as Cobra and in these the interval between bite and death of the victim varied from 30 minutes to 30 hours.

In Gujarat Registration District, 248 deaths from snake-bite were reported against 292 in 1928. Of these, 80 deaths were caused by " black serpents ", 31 by " cobras " while 93, the species not identified. The period during which the victim was alive after the bite varied from a few minutes to two days in the case of " black serpents " and from a few minutes to 10 hours in the case of " Cobras ".

60. *Rabies.*—166 deaths were reported under this heading against 196 in the previous year. Satara District recorded the highest number of deaths—19, Ahmednagar 19, Ahmedabad 19 and Poona 14. Sholapur town reported 6 deaths and Ahmedabad City 5 deaths.

In the Southern Registration District, 110 deaths were reported as due to murders out of the total deaths of 1,560 registered under Injuries. Belgaum District recorded 63, Bijapur 25, Dharwar 14 and Kanara 8.

61. *Suicidal deaths show an increase.*—633 (364 males and 269 females) against 580 (368 males and 212 females), in the previous year. Details by Districts are as follows :—

District	Drowning	Poisoning	Hanging	Wounding	Railway	Total
Bombay City	5	55	11	9	3	83
Dharwar	25	..	51	..	..	76
Belgaum	29	2	43	..	..	74
Bijapur	14	1	40	..	1	56
Sholapur	8	21	13	..	..	42
Kaira	15	8	14	3	1	41
Thana	9	1	23	1	..	34
Satara	10	8	9	..	2	29

Other Causes.

62. Under this heading a number of deaths are recorded which cannot be included under the tabulated headings such as debility, old age, rheumatism, also deaths which owing to the ignorance of the Village Registrar are not properly classified.

It covers ordinarily about one-fourth of the total deaths and its numerical importance in the mortality tables, therefore, comes second to " Fevers " which is also a general term. It is subject to less fluctuation than other headings. For these reasons it presents a reliable index to the general health of the community when compared for several years.

167,604 deaths (84,130 males and 83,474 females) were registered as compared with 162,062 (81,823 males and 80,239 females) in 1928 and a quinquennial mean of 155,387. The death-rate was 8·75 against 8·46 in 1928 and a quinquennial mean of 8·11.

The annual mortality for previous years is as follows :—

Year.	No. of deaths.	Ratio per mille.
1901-10 mean ..	140,618	7·61
1911-1915 mean ..	144,911	7·40
1916-1920 mean ..	164,773	8·41
1921	134,263	7·01
1922	130,766	6·82
1923	140,154	7·31
1924	159,008	8·30
1925	140,053	7·31
1926	166,069	8·67
1927	149,745	7·81
1928	162,062	8·46
1929	167,604	8·75

63. *Deaths during Child-birth.*—One of the sub-heads of "Other Causes" shows an increase from 4,265 in 1928 to 4,987 during the year under report. For the Western, Central, Southern, Gujarat and Sind Registration Districts, the total deaths were 830 ; 1,129 ; 946 ; 590 ; 1,298 ; as compared with 846 ; 1,036 ; 855 ; 547 ; 833, respectively in the previous year. This increase is more apparent than real and is due to more correct classification by the Village Officers as their attention is specially drawn to it of late years by Assistant Directors and Associations working to reduce it.

In Bombay City 194 deaths were recorded during the year against 128 in 1928. The increase was shared by all the Registration Districts except Western, Sind being the highest as compared with the preceding year.

Taking the Presidency as a whole, one woman was reported to have died at child-birth to every 147 live births as compared with one per 172 in 1928. The urban and rural figures were one per 81 and 173 respectively as compared with 97 and 201 in the preceding year.

By Registration Districts, the toll of life exacted by child-birth was the highest in Sind where one mother was reported to have died as the result of child-birth to every 96 births, Southern one to 137, Central one to 176, Gujarat one to 203 and Western one to 215 births.

In the Central Registration District, Satara and Pandharpur towns have shown the highest mortality from child-birth as in these towns one mother has died after every 35 and 36 live births respectively, the figures for previous year being 32 and 43. The best figures are given by Barsi town where one woman has died after every 344 live births. Nagar town has shown very high mortality as compared with last year, one woman died after every 57 live births instead of 86 in 1928. Poona and Sholapur have shown some slight improvement. The greatest improvement was shown in the Ratnagiri Town where the deaths from child-birth are

more than half during the year under report. It is hoped that this improvement in Ratnagiri town will be maintained in subsequent years.

The Assistant Director of Public Health, Central Registration District, reports :—

"In an enquiry conducted by Drs. Balfour and Talpade, it has been found that amongst the mill workers in Bombay City the maternal mortality was 1·07 per 1,000 births and this low mortality is due to immunity associated with the both, diet and mode of the worker. The same consideration probably induced a low maternal mortality in Ratnagiri, Barsi and Sholapur Towns. They have also shown that astiomalacia is a potent cause of deaths from child-birth and it is more common amongst the non-industrial classes."

Among Collectorates, the toll of life exacted by child-birth still continues to be the highest in Kanara where one mother died for every 45 births registered as compared with 42 in the previous year. The maternal mortality rates for other Collectorates of the Southern Registration District were Dharwar 1 to 158, Belgaum 1 to 191 and Bijapur 1 to 234 as against 153, 237 and 289 respectively in 1928. Elsewhere the following districts show high rates :—Nasik 1 to 109, Thana 1 to 150, Ratnagiri 1 to 155, Poona 1 to 159, Ahmednagar 1 to 176, and Kolaba 1 to 189. The Sind rates are still higher, e.g., Larkana 1 to 42 births, Sukkur 1 to 47, Hyderabad 1 to 55, Karachi 1 to 73, Nawabshah 1 to 73, Thar and Parkar 1 to 83, and Upper Sind Frontier 1 to 231 births.

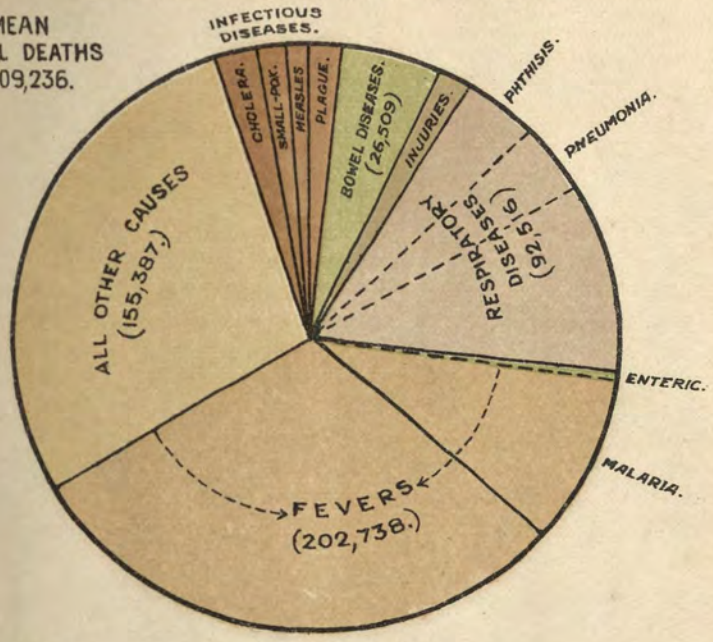
Sind towns show extreme rates as compared to the Presidency proper, for example, Larkana one maternal death in every 30 births, Shikarpur one in every 35, Sukkur one in every 40, Hyderabad one in every 50 and Karachi one in every 85 births. There is increase in all towns in maternal deaths as compared with last year, which was probably due to abnormal conditions prevalent during the year under review. It must be admitted, however, that Karachi and Hyderabad towns continue to show a markedly lower maternal mortality as compared with the other towns. Karachi town shows less number of maternal deaths due to the activities of the Health Association Midwives. 851 maternity cases were conducted by six midwives as compared with 742 in 1928. Hyderabad town also shows less number of deaths as compared with other towns. It is due to the activities of Miss R. Piggot and also due to the activities of the Lady Health Visitor employed in Hyderabad town.

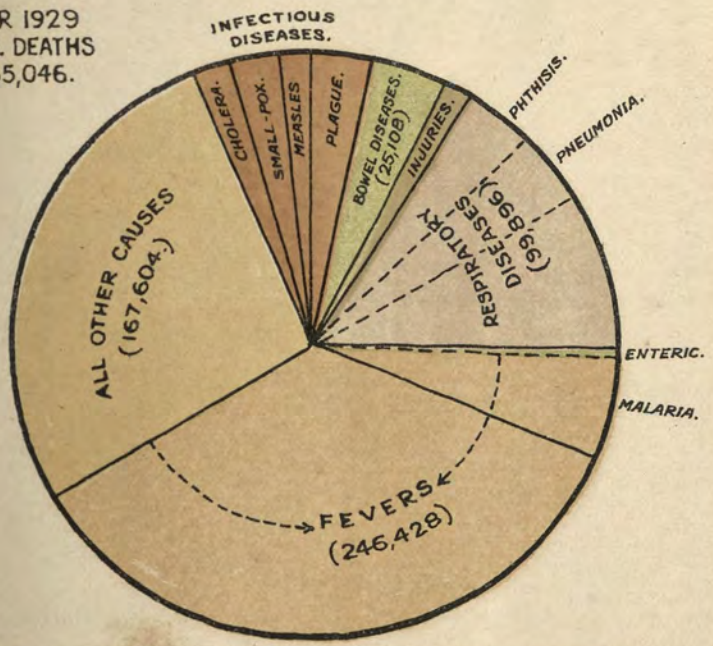
In Bombay City, one mother died for every 123 births against 184 in 1928. Amongst towns, in the Presidency proper, the highest rates were reported from Malegaon one to 26 births, Satara one to 35, Pandharpur one to 36, Nasik one to 39, Ahmedabad one to 51, Kurla one to 55, Nagar one to 57, Nadiad one to 64, Broach one to 65, Poona City one to 79, Sholapur one to 94, Surat one to 105, and Hubli one to 193 births.

64. The number of deaths from Chief Causes for each Collectorate and by months are shown in Annual Form Nos. VII to XII.

CHART V.

COMPARATIVE DIAGRAMS OF DEATHS BY CAUSES FOR MEAN 1924-28 & FOR 1929.





N.B.- EPIDEMIC DISEASES ARE SHOWN IN RED.

G.P.E.O. POONA, 1930.

SECTION VII.

VACCINATION.

65. *Selected Districts.*—The system introduced in the year 1910 by which the control of vaccination in one district of each Registration Circle is exercised by the Local Board of that district was continued throughout the year.

66. *Changes in Area and Administration.*—Sanction was accorded by Government to the transfer of control of vaccination to the States of Vijayanagar and Danta in Mahi kantha Agency.

67. *Changes in the strength of the establishment.*—During the year under report the Karachi Municipality employed two additional permanent vaccinators, one Lady Visitor and one Notice Server. The Bijapur District Local Board abolished the post of the vaccinator for depressed classes as it was found superfluous and the work turned out was unsatisfactory and was not commensurate with the expenditure incurred. The Savanur State divided their vaccination area into urban (Savanur Town) and rural areas, the former being entrusted to the State vaccinator and the latter to the Assistant Medical Officer of the State.

Primary Vaccination (Appendix IV, Statement I).

68. During the year 1929-30, 703,689 persons were primarily vaccinated against 652,893 in the previous year. There is an increase of 50,796 over last year's figures. There is an increase in all the Registration Districts except Sind.

The following table shows the number of children under one year available for vaccination calculated (1) on the number of births registered less deaths under one year; (2) and on probable number of births at 31 per 1,000 of population less deaths and the percentages successfully vaccinated :—

District	Population	Number of births during the year	Deaths under one year	Births *minus* deaths
1	2	3	4	5
Western R. D.	4,027,344	178,840	34,958	143,882
Central R. D.	4,702,505	194,838	35,775	159,063
Southern R. D.	3,183,777	129,885	21,172	108,713
Gujarat R. D.	2,958,849	119,647	22,677	96,970
Sind R. D.	3,279,377	80,138	16,786	63,352
Total ..	18,151,852	703,348	131,368	571,980

District	Births at the rate of 31 per 1,000 of population	Number of children under 1 year successfully vaccinated	Percentage of available children (column 5) successfully vaccinated	Percentage of available children 31 per 1,000 of population (column 6) *minus* deaths successfully vaccinated
1	6	7	8	9
Western R. D.	124,848	90,253	62·73	100·40
Central R. D.	145,778	108,699	68·34	98·81
Southern R. D.	98,697	67,876	62·44	87·55
Gujarat R. D.	91,724	65,609	67·66	95·02
Sind R. D.	105,786	48,449	76·48	54·44
Total ..	562,708	380,886	66·59	88·05

For the Presidency as a whole the percentages were (1) 66·59 and (2) 88·05.

69. *Results.*—Out of 703,953 primary vaccinations performed 599,288 or 85·14 per cent. were successful and 1,628 or 0·23 per cent. unsuccessful. In the remaining 14·63 per cent. of cases the results could not be ascertained.

264 infants were vaccinated a second time owing to failure of the first operation.

70. *Age and Sex.*—Of the primary vaccinations 428, 231 or 60 per cent. were infants under one year of age, and 158, 330 or 22 per cent. of children between the ages of one and six years. By sex, 371, 727 were males and 331,962 females, equal to a proportion of 111·67 to 100. The proportion of male to female children born during the year was 107·90 to 100.

Re-vaccination (Appendix IV, Statement I).

71. During the year 489,864 persons were re-vaccinated against 144,270 in the previous year showing an increase of 345,594. The percentage of successful vaccinations was 19·99. Results could not be ascertained in 64·36 per cent. of cases.

The increase of re-vaccinations over last year's figures is shared by all the Registration Districts and is the result of mass vaccination carried on by the Assistant Directors.

72. *Vaccination of Pilgrims at Karachi.*—A temporary vaccination establishment consisting of one male vaccinator, one female vaccinator, one clerk and one coolie was entertained in Karachi town for the vaccination of pilgrims proceeding to Hedjaz. 7,018 pilgrims were re-vaccinated during the months of December 1929 to April 1930 of whom 5,657 were males and 1,361 females. By age periods, 28 were under one year, 63 between one and ten years and 6,927 above ten years. The total expenditure incurred on vaccination of these pilgrims amounted to

Rs. 816-9-0 and was defrayed by Government. In the preceding year, 8,172 pilgrims were re-vaccinated at a total expenditure of Rs. 802-13-8.

Vaccination in Indian States (Appendix V, Statement I).

73. In the Indian States, 83,887 persons were primarily vaccinated against 83,111 in 1928-29. The number of successful cases was 81,444 or 97·11 per cent. The percentage of success excluding unknown was 99·93.

Re-vaccinations numbered 25,314 against 5,189 in the previous year. The success rate excluding 3,430 unknown results was 76·81.

74. *Total Operations.*—During the year the total number of primary vaccinations performed amounted to 787,576 and of re-vaccinations to 515,238 against 736,004 and 149,459 in 1928-29.

75. *Incidence of Small-pox.*—The following table shows the incidence of small-pox by three age-periods in the different Registration Districts :—

Districts	Total deaths	Age			Percentage of deaths		
		Under one year	Under ten years	Above ten years	Under one years	Under ten years	Above ten years
Western R. D. ..	10,813	3,696	6,174	943	34·19	57·08	8·73
Central R. D. ..	2,925	812	1,518	595	27·76	51·90	20·34
Southern R. D. ..	1,027	262	421	344	25·51	40·99	33·50
Gujarat R. D. ..	4,560	1,572	2,487	501	34·48	54·54	10·98
Sind R. D. ..	747	190	353	204	25·44	47·26	27·30
Total ..	20,072	6,532	10,953	2,587	32·54	54·57	12·89

In all there were 20,072 deaths, the quinquennial mean being 4,622. The incidence was heaviest in East Khandesh, West Khandesh and Nasik Districts.

Towards the end of the year 1929 an epidemic of small-pox broke out in Poona City and a severe epidemic of the disease was expected throughout the Presidency. The only way to successfully combat this apprehended pandemic was by resorting to mass vaccination and re-vaccination. With the object of starting an extensive vaccination campaign in Poona an informal meeting was called at the office of the Director of Public Health, to which the Assistant Directors of Public Health, Central and Western Registration Districts, representatives of the Kirkee and Poona Cantonments, the Vice-President and Chief Officer of the Suburban Municipality, President and Medical Officer of Health of the Poona City Municipality, District Medical Officer, G. I. P. Railway, Lonavla, and Vice-President, District Local Board, Poona, attended.

It was resolved that the number of vaccinators for Poona should be increased; that special meetings of the Local Bodies should be held at

which the Assistant Director of Public Health should explain the benefits of vaccination and enlist the sympathy of the Councillors in carrying out mass vaccination and re-vaccination ; that reserve stock of lymph should be kept in a Frigidaire in the office of the Assistant Director of Public Health, Central Registration District, to meet local demands ; that daily figures of attacks and deaths from small-pox and number of vaccinations should be supplied to all local papers and that the Propaganda Officer should give magic lantern demonstrations in various parts of Poona. As a result of the campaign 4,802 primary and 49,731 re-vaccinations were performed in " Greater Poona " from January to end of March 1930. Six special vaccinators were entertained by the Poona City Municipality, two by the Poona Suburban Municipality and one by Poona Cantonment. The Poona City and Poona Suburban Municipalities and Poona and Kirkee Cantonments requested Government to extend the provisions of the Bombay District Vaccination Act I of 1892 to their areas and accordingly the Act has been introduced in these areas.

76. *Vaccination Campaigns.*—A Press Note regarding the expected pandemic of small-pox was issued in January 1930. The Commissioners of Divisions were requested to issue necessary instructions to all the Revenue and Local Authorities to render the Assistant Director of Public Health the help they may require in carrying out mass vaccination.

The Director, Vaccine Institute, Belgaum, was asked to be ready to cope with the increased demand for lymph. Frigidaires for storage of lymph were installed in Karachi and Poona. The Assistant Directors addressed all the Local Authorities and Government officials of the various Departments requesting them to get their subordinates vaccinated. They interviewed Local Authorities and discussed with them the measures against small-pox. Special vaccinators were appointed in municipal and Local Board areas and intensive vaccination campaigns were undertaken.

Due to unexpected and abnormally heavy demands for lymph, the work at the Vaccine Institute increased enormously necessitating the appointment of temporary additional staff to cope with the demands. All holidays at the Institute were cancelled. Lymph was being supplied in 50 dose vials for mass vaccination instead of the usual 5 and 10 dose vials, as this was found to be convenient and economical. The usual number of calves admitted weekly was 38, but to meet the abnormal demand for lymph 977 calves were taken within a short period of ten weeks. Unfortunately on account of cattle disease round about the district, great difficulty was experienced in getting calves. The contractor was unable to supply them. The Commissioner, Southern Division, Mr. Smart and the Executive Officer, Belgaum Cantonment, Captain Jones, by their personal interest and endeavour were able to get the requisite calves and to save the critical situation and avert what might have been lamentable episodes. Thanks are due to these Officers but for whose help at this critical juncture the work of the Institute would have been seriously handicapped.

The Director of the Belgaum Vaccine Institute had at the same time made arrangements with the neighbouring Institute of Guindy (Madras) to supply him with lymph to meet partially with the above contingency.

77. *Propaganda Officer.*—The Second Assistant Superintendent, Vaccine Institute, Belgaum, was appointed Propaganda Officer. He arrived in Poona on 19th January 1930 and from then until the middle of April, when he returned to Belgaum he was engaged in giving lectures on small-pox and magic lantern demonstrations. Starting at Poona, he visited Ghera-Sinhgad in Haveli Taluka of the Poona District, and Wai in Satara District and thence proceeded to the Gujarat Registration District. He visited Bulsar, Surat, Broach, Godhra, Dakore, Nadiad, Dholka, Viramgam and Ahmedabad and full co-operation was given to him by the Local Authorities and the staff of this Department in making the demonstrations a success. He next toured the Western Registration District which was rather badly affected with small-pox. Lectures and demonstrations were given in 21 towns. The lectures attracted large crowds of people and thus have done much in awakening public interest and in educating them.

Owing to small-pox in Aden, temporary small-pox regulations were prescribed. Eleven special vaccinators were appointed and mass vaccination was carried on.

With the object of reducing the number of unprotected school children to a minimum the usual monsoon campaign was conducted by Inspectors of Sanitation and Vaccination in municipal towns and taluka head-quarters.

Vaccination in Police Lines and outposts is being carried out regularly. Special visits are paid by the vaccinators every month for that purpose.

The vaccinators in charge of big fair centres were directed to push on primary and re-vaccinations well in advance of the fairs.

78. *Lymph.*—The lymph prepared at the Vaccine Institute, Belgaum, was the only one used throughout the Presidency.

The following table gives the results of all vaccinations performed excluding cases in which the result could not be ascertained :—

Circles	Number of Operations		Successful		Percentage of success excluding unknown	
	Primary vaccination	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination
Western R. D. ..	146,352	37,770	117,885	14,805	91·48	62·25
Bombay City ..	26,387	88,863	23,338	...	99·91	..
Central R. D. ..	164,380	132,763	149,525	36,229	99·95	73·79
Southern R. D. ..	105,397	93,102	101,118	27,361	99·85	43·64
Gujarat R. D. ..	134,244	45,014	119,166	10,534	99·38	49·19
Sind R. D. ..	93,339	40,044	85,790	6,641	99·72	45·92

79. *Cost of Vaccination.*—The cost of vaccination came to Rs. 6,65,859 against Rs. 6,63,821 in the previous year. The increase in the expenditure is due to increments in pay of Inspectors and vaccinators and appointment of special vaccinators for mass vaccination. The average cost of each successful case of vaccination was Re. 0-15-5 against Rs. 0-15-8 in the previous year.

80. *Vaccine Institute, Belgaum.*—Owing to the prevalence of smallpox in Aden and an increased demand for lymph due to vaccination campaigns carried on in the Presidency in response to an appeal for mass vaccination, the Institute had a very busy time especially during the last three months of the year. 1,820,230 doses of lymph were issued as compared with 1,258,670 during the previous year. Besides the vaccinators of the Presidency, lymph was supplied to Baroda, Kotah and Jhalwar, Kathiawar, Palanpur and Mahi Kantha Agencies, and Idar State. Civil and Military Medical Officers were also supplied with lymph.

81. Of the 1,820,230 doses issued, 1,247,113 were reported to have been used. 262,675 doses were issued to Indian States, 232,505 to Civil Medical Officers and 48,195 to Military Medical Officers, the success rate for all primary operations being 99·77 and for re-vaccinations 62·99. The case success rate (99·66) in the Indian States is almost equal to that (99·67) in the Presidency districts.

The results of primary vaccinations performed by the vaccinators were carefully scrutinized by the Director of the Institute. A chart showing the results of monthly primary vaccinations for the three years in the five Registration Districts and in Bombay City is attached.

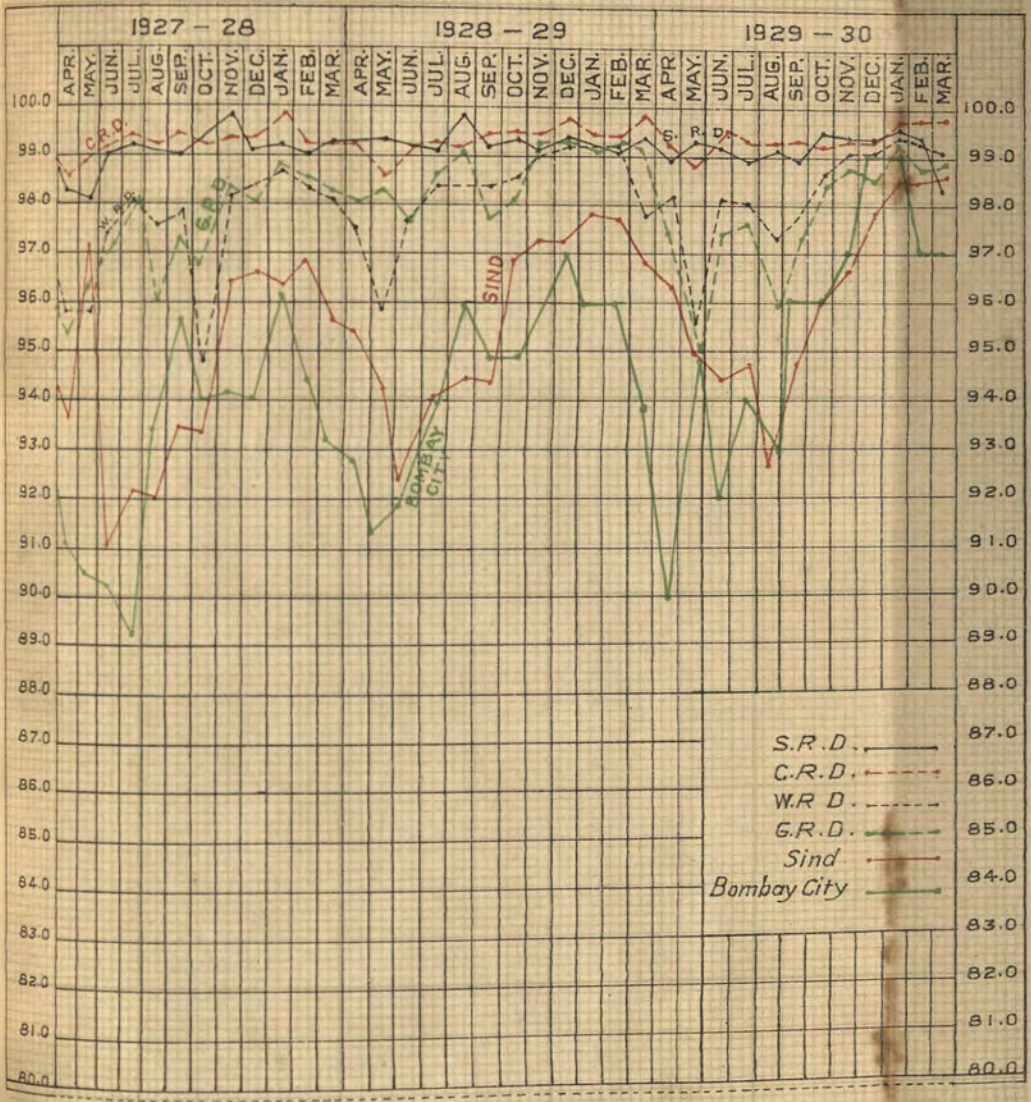
The experiment of passage of seed lymph through donkeys could not be tried in the winter as the Institute was then busily engaged in manufacturing large quantities of lymph for mass vaccination. Rabbits were used for passage and they served their purpose well to keep seed lymph of standard quality and potency as usual.

Wastage.—The percentage of doses wasted in Sind Registration District was high as compared with other Registration Districts.

Calves.—There were 58 animals in stock at the commencement of the year. 1,719 cow calves were hired as compared with 985 during the previous year. At the end of the year, 142 calves remained in stock. Of the 1,635 calves vaccinated 32 proved unsuccessful and the lymph from 69 was rejected as unfit for use.

Cattle Disease.—A severe epidemic of Rinderpest and other cattle diseases were raging in the neighbourhood of the Institute. In spite of all the precautions taken there were 19 cases of Rinderpest in August 1929 and 11 of foot and mouth disease in February 1930 among the calves.

INSERTION SUCCESS RATES OF PRIMARY VACCINATIONS WITH GLYCERINATED LYMPH IN THE SEVERAL REGISTRATION DISTRICTS OF THE PRESIDENCY & BOMBAY CITY FOR THE YEARS 1927-28, 28-29 & 29-30.



Test of potency of lymph before issue.—The practice of testing every lymph on children, before issue from the Institute, was continued, 1,809 children being vaccinated in this way.

Repairs.—No new buildings were constructed. Current repairs were carried out as usual by the Public Works Department.

The work of constructing the new rabbit house has not yet been taken in hand for want of funds.

The following projects are still under consideration :—

(1) Additional quarters for the staff.
(2) A new school house.
(3) Lecture hall.
(4) Hostel for vaccinators and others attending special training class held at the Institute.

Refrigerating Plant and Machinery.—The present underground cold-room was found unsatisfactory and incapable of maintaining the desired temperature. Plans and estimates amounting to Rs. 20,912 for the construction of a Frigidaire type of refrigerator above ground have been submitted to Government.

Drainage.—The drainage system continued to work satisfactorily. The effluent from the septic tank was utilized as usual for irrigating crops of lucerne and banana trees on a portion of the sewage farm. During the rains the remaining portion of the farm was used for crops of *bajri* and *jawari* which served as fodder for the calves.

Expenditure.—The expenditure for the year amounted to Rs. 83,194-14-10 including the expenditure on cold store and excluding annual repairs to buildings, interest on capital outlay and pension and leave contribution, against Rs. 69,916-4-1 during last year. There was thus an increase in expenditure of Rs. 13,278-10-9 due to increased output of lymph for mass vaccination. The receipts including sale of lymph and contributions came to Rs. 90,507-11-3 showing a profit of Rs. 7,312-12-5. If interest on capital outlay, etc., are included in the expenditure there was a deficit of Rs. 17,986-1-10. The net expenditure after deducting sale proceeds of lymph to non-contributing bodies was Rs. 37,367-3-7 against Rs. 46,681-0-1 in the previous year. The cost of lymph per dose manufactured amounted to 8·02 pies and cost per dose despatched 11·31 pies.

Institute Staff.—The Second Assistant Superintendent was appointed as a Propaganda Officer from 20th January to 18th April 1930. An extra staff of 6 Laboratory Assistants and 8 menials was engaged from the last week of January 1930 to cope with the increased amount of work.

His Excellency Sir Frederick Sykes and Lady Sykes accompanied by Mr. Maxwell, Private Secretary, Mr. MacGregor, Commissioner, S. D., and Mr. Montgomery, Collector of Belgaum, visited the Institute on the

29th October 1929. The Surgeon General with the Government of Bombay and members of the Medical Association, Belgaum, saw the detailed working of the Institute.

82. *Compulsory Vaccination.*—Excluding Bombay City, Aden and the five Cantonments of Ahmedabad, Ahmednagar, Hyderabad, Belgaum and Deolali, the Vaccination Act is in force in only 13 towns of this Presidency. In other Provinces vaccination is compulsory in urban and rural areas as under :—

Bengal Presidency ..	.. Rural and urban areas including the existing 116 municipalities.
Madras Presidency ..	.. All (82) municipal towns, 17 districts and major portion of the remaining 8 districts.
United Provinces ..	.. 156 municipalities, Cantonments and Notified Area Committees and some town areas.
Burma ..	.. 63 Municipalities and Notified Area Committees and some districts.
Bihar and Orissa ..	.. 58 municipal towns and certain rural areas.
Central Provinces ..	.. All municipal and Notified Area Committees except one.
Assam ..	.. 23 towns.
Punjab ..	.. 106 towns.
N. W. Frontier Province	... 9 towns.
Coorg ..	.. 2 towns.

348 prosecutions were instituted under the Act during the year mostly in Karachi City (302). Fines were inflicted in 35 cases and 6 cases were pending at the end of the year.

The bye-laws regarding registration of births are not properly enforced in some municipalities with the result that many births escape registration and the number of children vaccinated is in consequence smaller than it should be. Such children provide a potential source of danger to the community and it is for Local Bodies to realize this and to see to it that all births which occur in their areas are registered and the children vaccinated.

The following table shows the progress made in the protection of infants during the year under report and the number of deaths from small-pox during five years in those towns in which the Act has been

in force together with date of extension of Vaccination Act to the towns :—

Name	Population	No. of births during the year	Children available for vaccination		No. of children under one year successfully vaccinated
			Births minus deaths of children under one year	At the rate of 31 per 1000 of population	
1	2	3	4	5	6
Bombay City	1,175,914	23,907	16,719	36,453	15,692
Bandra	29,271	671	558	907	870
Kurla	26,059	639	484	807	556
Dhulia	30,605	1,278	1,015	948	1,114
Deolali Cantonment ..	18,789	22	7	582	120
Bhusawal	24,933	576	391	773	407
Malegnon	23,771	659	501	737	391
Ahmedabad	270,775	13,383	8,379	8,394	8,425
Ahmedabad Cantonment ..	3,232	26	19	100	....
Karachi	216,883	11,367	8,777	6,961	5,816
Hyderabad	73,951	3,010	2,261	2,512	1,032
Hyderabad Cantonment ..	3,760	24	18	116	59
Sukkur	42,759	1,318	925	1,340	559
Rohri	11,378	356	240	308	140
Larkana	17,723	716	472	572	96
Ahmednagar Cantonment ..	10,997	321	261	340	321
Ahmednagar City	33,178	1,205	1,025	1,027	1,531
Barsi	22,074	689	476	684	544
Belgaum Cantonment ..	6,889	64	49	213	175
Aden	56,500	896	....	1,751	614

Name	Number of deaths from Small-pox					Date of extension of Vaccination Act to Town
	1925-26	1926-27	1927-28	1928-29	1929-30	
1	7	8	9	10	11	12
Bombay City ..	413	651	723	867	1,135	September 1877.
Bandra	8	7	5	3	6	August 1900.
Kurla	3	12	2	3	2	Do.
Deolali Cantonment ..	..	..	2	..	..	August 1915.
Dhulia	3	3	5	..	73	15th June 1925.
Bhusawal	1	6	16	1	32	17th August 1926.
Malegaon	..	34	318	11	191	15th February 1930.
Ahmedabad	93	14	8	20	989	6th July 1913.
Ahmedabad Cantonment ..	..	..	..	..	..	Do.

Name	Number of deaths from Small-pox					Date of extension of Vaccination Act to Town
	1925-26	1926-27	1927-28	1928-29	1929-30	
1	7	8	9	10	11	12
Karachi	55	52	8	104	258	October 1879.
Hyderabad	8	50	12	6	57	February 1914.
Hyderabad Cantonment ..	..	..	..	..	..	Do.
Sukkur	47	1	..	2	24	June 1904.
Rohri	5	..	..	5	21	Do.
Larkana	25	4	2	..	8	April 1899.
Ahmednagar Cantonment	1	..	1	..	..	26th April 1925.
Ahmednagar City ..	7	2	113	7	2	25th October 1928.
Barsi	..	..	..	4	6	1st January 1930.
Belgaum Cantonment ..	..	..	..	..	2	26th April 1925.
Aden	5	2	3	11	153	28th December 1916.

During the year the Compulsory Vaccination Act was brought into force in Malegaon and Barsi towns. One more Public Vaccination Station was opened at Sukkur in Barrage Hospital for the convenience of the people in the Right Bank Barrage Township and the provisions of the Act were extended to that area in consultation with the Chief Engineer, Lloyd Barrage and Canals Construction.

83. The practice of inoculation was not detected in any taluka during the year under report.

84. One case of ill effects after vaccination was reported from Hyderabad town. On enquiry it was found that the child was vaccinated during the incubation period of measles and seemed to have suffered more than usual.

85. A diagram illustrating the proportion of population protected by vaccination during the seven years from 1st April 1923 to 31st March 1930 and the death-rate from small-pox for the year 1929-30 is given in Appendix VI.

86. *General Remarks.*—A training class for vaccinators was held from 1st July to 30th September 1929. There were in all 20 candidates all of whom passed the final examination. Dr. Shah from Hyderabad (Sind) was trained in the lymph manufacture and all other things concerning vaccination.

"Afrin Namas" were granted by the Assistant Director of Public Health, Sind Registration District, to two influential gentlemen for rendering help to the Inspectors and vaccinators in the performance of their duties.

There were two vacancies of Inspectors of Sanitation and Vaccination in Gujarat Registration District and one in Sind Registration District. One Inspectorship was given to a Hindu vaccinator while the other two were given to Mahomedan vaccinators during the year 1930.

SECTION VIII—No remarks.

SECTION IX.

Sanitary Works—Civil.

87. *Municipalities.*—The abolition of Gogho Municipality in Ahmedabad District during the year under report reduced the number of municipalities (excluding Bombay City) to 155 with a total population of 2,678,542. Their total income excluding opening balance for the year was Rs. 3,53,31,708 of which Rs. 1,67,54,048 or 47 per cent. was raised by taxation, giving an incidence per head of population of Rs. 6-4-1. Taxation varied between Rs. 15-2-4 in Karachi City and Re. 0-11-11 in the small municipality of Ashta in Satara District. The figures include a special conservancy cess in the case of many municipalities.

The incidence of municipal income and taxation per head of population in the larger municipalities is as follows :—

	Income.	Taxation.
	Rs.	Rs.
Bombay	27	23
Karachi	25	15
Ahmedabad	13	10
Poona	12	8
Surat	9	7
Sholapur	8	6

The expenditure on public health measures came to Rs. 12 per head of population in Karachi City and averaged Rs. 3 for all remaining municipalities.

The following statement shows the birth and death rates among the municipal population in each district. Out of the 155 municipal towns, 86 suffered from small-pox, 45 from plague, 54 from cholera, and only 10 from influenza. The cause mentioned is not the only one from which the number of towns shown suffered but also from one or the other of the diseases mentioned against them.

In 13 Revenue districts as compared with 8 in 1928 the municipal death rate exceeded 30 per 1,000 of population. Comment on death rates in principal towns has already been given in paragraph 19.

Statement showing birth and death rates for Municipalities in the Bombay Presidency during the year 1929.

	Number of Municipalities.	Ratio of births per 1,000 of population.	Ratio of deaths per 1,000 of population				
			Cholera.	Small-pox.	Plague.	Influenza.	All causes.
Ahmedabad ..	8	44·99	..	1·01	..	..	46·02
Kaira ..	8	39·42	..	1·57	..	..	38·38
Panch Mahals ..	2	35·99	..	·39	..	..	21·70
Broach ..	3	42·42	..	·03	..	..	28·59
Surat ..	3	37·49	·01	1·49	..	·01	37·24
Thana ..	4	23·01	·02	·59	·63	·02	22·17
East Khandesh ..	12	34·22	2·55	1·67	..	..	28·17
West Khandesh ..	7	39·09	·35	·81	·03	..	27·92
Nasik ..	9	24·92	·77	1·70	7·50	·02	36·36
Ahmednagar ..	2	34·05	·02	·02	..	·02	22·15
Poona ..	11	23·36	..	1·77	·18	..	35·25
Satara ..	12	25·01	..	·24	1·29	..	25·00
Sholapur ..	5	41·11	·01	·07	1·03	..	41·58
Belgaum ..	6	32·10	·03	·06	5·65	..	33·16
Dharwar ..	10	34·67	..	·32	4·37	·05	31·86
Bijapur ..	4	38·01	·01	·19	1·01	..	34·93
Kanara ..	8	31·55	..	..	1·25	..	21·82
Kolaba ..	7	23·29	..	1·65	..	..	18·76
Ratnagiri ..	4	29·62	·01	..	1·06	..	20·78
Karachi ..	5	52·36	·54	1·63	..	·01	39·05
Hyderabad ..	6	36·03	1·22	·25	..	..	34·29
Larkana ..	5	34·12	7·37	·44	..	..	49·84
Thar and Parkar ..	2	21·97	·10	..	..	..	22·38
Nawabshah ..	2	39·55	·55	·05	..	..	26·27
Sukkur ..	5	30·64	2·16	·44	..	..	46·10
Upper Sind Frontier ..	1	17·39	3·31	..	..	..	25·05
Bombay Suburban ..	4	23·07	..	·62	·02	..	20·27

88. The Assistant Directors of Public Health in the course of their regular tours and special visits make a point of conferring with the Councillors of Local Bodies or their officers on matters concerning public health.

During the year complete sanitary surveys of 17 towns were made and inspection or reports in the case of 108 more. Advice was given in all these and in numerous other cases in matters of water supply, conservancy, prevention of spread of disease and in measures of a more general nature. Action was taken by many of the municipalities on the suggestions of Assistant Directors, of which the following is a brief summary :—

Nasik, Kurla, Hubli, Gadag, Haveri, Guledgud, Karwar, Surat and Dholka constructed new latrines.

Erandol, Bhusawal, Rawer, Nandurbar, Bhagur, Athni, Dharwar, Hubli, Ranebennur, Haveri, Byadgi, Bagalkot and Guledgud constructed new gutters.

Shirpur, Bandra, Saundatti, Gadag, Ranebennur, Bijapur and Hyderabad constructed new drains.

Erandol, Igatpuri, Manmad, Ranebennur, Nargund and Haliyal improved water-supply.

Dhulia, Igatpuri and Hubli purchased new dust-bins.

Dhulia, Nasik, Hubli and Surat constructed urinals.

Bhagur and Haveri removed prickly pears.

Dharangaon constructed and repaired wells.

Kalyan purchased a motor lorry for the removal of rubbish.

Bandra framed bye-laws for the registration of births and deaths and notification of dangerous diseases.

Hubli opened a new public garden in the name of Lady Sykes.

In addition to the above, repairs to existing drains, markets, wells, free distribution of quinine and medicines for the prevention and cure of cholera and other works of public health utility were undertaken by many municipalities.

The Assistant Director of Public Health, Gujerat Registration District, states that the Nasik system of trenching night-soil is working satisfactorily in 10 towns. The system has proved a great success in Nadiad and Surat. Rs 620-8-0 and Rs. 1,174-14-0 were realized from the sale of the poudrette by the Nadiad and Surat Municipalities respectively. Godhra municipality realized Rs. 219 against Rs. 102 in the previous year and the poudrette is much in demand among the cultivators. The system has been introduced in some of the towns in Khandesh and Nasik. When this system is properly worked with due attention to detail it provides excellent manure for which there is always ready market.

The Assistant Director of Public Health, Sind Registration District, at every visit to Municipal towns impressed on the Local Authorities the advantages of Nasik System.

89. *Municipal Health Staff.*—During the year under report fully qualified Medical Officers of Health were employed in Karachi Hyderabad, Ahmedabad, Surat, Poona and Sholapur. In Karachi and Ahmedabad qualified Assistant Health Officers were also employed. Health Officers holding the medical degree of the Bombay University in addition to the Sanitary Inspectors' certificate and the B.Hy. (Bombay) were employed at Broach, Bandra, Ahmednagar and Bijapur. Nasik and Dhulia had a Health Officer possessing the qualifications of a Medical Officer for a second class town, while Dakore, Nadiad and Saundatti employed Licentiates of the College of Physicians and Surgeons holding Sanitary Inspectors' certificates.

Rao Saheb Dr. Gune, L.M.& S., continued to hold charge of Pandharpur.

Eighty-seven qualified Sanitary Inspectors were employed in 41 towns as compared with 84 and 40 respectively in 1928; Ahmedabad 12; Poona 8; Sholapur 7; Surat 7; Karachi 3; Sukkur 3; Nasik, Bijapur, Belgaum, Hubli, Gadag, Pandharpur, Ahmednagar, Hyderabad and Shikarpur 2 each; and the following one each Nandurbar, Dhulia, Jalgaon, Bhusawal, Amalner, Chopda, Malegaon, Trimbak, Igatpuri, Manmad, Thana, Kalyan, Kurla, Bandra, Ghatkopar, Matheran, Bagalkot, Saundatti, Barsi, Satara, Panchgani, Rohri, Tando Adam, Larkana, Rander, Bulsar, Broach, Viramgaon and Godhra.

90. *Training of Sanitary Officers.*—One hundred and five new students were on the class roll in Bombay, of whom 100 together with 29 students from previous classes making up the total of 129 appeared for the examination. Of these, 53 passed the examination and obtained the certificate of the Royal Sanitary Institute, London. There were nine Government nominees for free studentships—four Medical Graduates, two Veterinary graduates, one Licentiate of the College of Physicians and Surgeons, one clerk in the office of the Assistant Director of Public Health, Southern Registration District and one Laboratory Assistant from the Vaccine Institute, Belgaum, who attended the course. Six of them appeared for the examination and five passed. Two Medical and one Veterinary graduates did not appear.

More advanced classes were held for medical men and at a further examination 2 out of 4 were passed as qualified to hold the post of Medical Officer of Health in a second class town.

91. *Inspection of Local Sanitation by Dispensary Medical Officers.*—Forty Dispensary Medical Officers in Western Registration District, 7 in Central Registration District, and 12 in Gujerat Registration District gave advice to local bodies and assistance in public health matters. The Medical Officers at Modasa, Dholka and Sanand receive small allowances of Rs. 5 to 10 per mensem from the Municipality for undertaking sanitary inspection of the towns.

92. *Sanitary Boards.*—The report on its working is published independently.

93. *Extension of Village Sites.*—Progress in this direction may be summarized as under :—

Belgaum.—One acre and 32 gunthas of land were acquired for the village of Sangankeri, Gokak Taluka, 5 acres, 2 acres and 12 gunthas and 2 acres and 10 gunthas of land were acquired for the villages of Mangavti, Yerual and Kabhur of Chikodi taluka respectively.

Dharwar.—Fifteen acres and 15 gunthas of land were acquired for the village of Maknur, Ranebennur taluka ; 2 acres and 26 gunthas, and 24 gunthas of land were acquired for the villages of Hattimattur and Nilogal respectively ; 6 acres, 8 acres and 24 gunthas, and 7 acres of land were acquired for the villages of Budangatti, Hangal M. Durga and Bailwad of Hangal taluka respectively.

Bijapur.—Two acres and 2 gunthas of land were acquired for the village of Timmapur, Hungund taluka ; 7 acres and 14 gunthas of land were acquired for the village of Alur S. Kerur, Badami Taluka.

94. *District and Taluka Local Boards.*—The aggregate income of the 27 District Local Boards and 222 Taluka Local Boards amounted to Rs. 1,96,59,304. Income and taxation per head of population were Rs. 1-4-6 and Re. 0-5-3 respectively against Rs. 1-4-8 and Re. 0-5-0 in 1928. A total sum of Rs. 32,13,020 was spent by these Boards on communications, while Rs. 8,03,128 were spent under the head of Public Health Works.

Under Government Resolution, General Department, No. 1570 of 17th June 1929, the following grants were placed at the disposal of the Commissioners of Divisions for distribution among the District Local Boards of the Presidency and Sind. These grants are intended to be utilized primarily for expenditure on roads and bridges :—

	Rs.	
Northern Division ..	3,67,000*	(*including the allotment for the Bombay Suburban Division.)
Central Division ..	5,32,000	
Southern Division ..	3,45,000	
Sind ..	3,56,000	

Under Government Resolution, General Department, No. 2429 dated the 30th May 1929, the following grants were placed at the disposal of Commissioners of Divisions for distribution among the District Local Boards of the Presidency and Sind for improvement of village water-supplies :—

	Rs.
Northern Division	57,000
Central Division	33,000
Southern Division	20,000
Sind	20,500
Bombay Suburban Division	2,000

and there was a reserve of Rs. 3,000 with Government. These grants were supplemented by allotments from Local Funds and popular contributions, and were expended on constructing wells, tanks, troughs and cisterns, in repairing old wells and closing step-wells and in boring operations.

Five hundred and ninety-six draw-wells were constructed during the year. One hundred and sixty-six step-wells were converted into draw-wells.

95. *Notified Areas.*—There were 27 Notified Area Committees working in this Presidency during the year under report as compared with 26 in the previous year (Committees which had not commenced work are excluded).

The population served by these Committees was 104,758 and the total income from revenue excluding opening balance came to Rs. 4,73,743 giving an incidence of income per head of Rs. 4-8-4. The following tables show the details of income and expenditure and the combined birth and death rates for Notified Areas in each district :—

Statement showing income and expenditure of the Notified Area Committees in the Bombay Presidency during the year 1929-30.

District.	Serial No.	Names of towns and villages.	Population.	Income including opening balance.	Expenditure.	Closing balance.
				Rs.	Rs.	Rs.
Bombay Suburban ..	1	Andheri ..	6,211	82,111	63,821	18,290
	2	Vile Parle ..	7,479	1,32,121	1,18,186	13,935
	3	Malad ..	8,460	27,539	23,979	3,560
	4	Kandivli ..	3,444	10,071	8,459	1,612
	5	Borivli ..	5,957	25,118	16,650	8,468
	6	Santa Cruz ..	9,000	1,58,104	1,37,194	20,910
	7	Chembur ..	3,101	5,309	4,843	466
	8	Mulund ..	3,000	4,780	3,990	790
	9	Ambernath ..	3,000	10,581	4,001	6,580
Ratnagiri ..	1	Dapoli ..	2,689	11,338	8,123	3,215
	2	Khed ..	3,842	26,270	18,236	8,034
	3	Rajapur ..	6,361	19,527	16,368	3,159
Bijapur ..	1	Hungund ..	5,563	5,224	2,289	2,935
Dharwar ..	1	Annigeri ..	7,853	2,612	2,086	526
Sukkur ..	1	Koti Sultan ..	1,696	1,978	1,269	709
	2	Mirpur Mathelo ..	1,642	1,697	1,194	503
	3	Ubauro ..	1,716	3,345	2,310	1,035
	4	Khairpur Dahorki ..	1,657	4,080	2,425	1,655
Satara ..	1	Lonand ..	1,872	3,319	1,639	1,680
Larkana ..	1	Mehar ..	2,746	21,851	9,328	12,523
	2	Khairpur Nathan-shah.	1,484	4,703	2,498	2,205
	3	Dadu ..	2,996	9,101	5,640	3,461
Poona ..	1	Talegaon Railway Station.	1,080	2,688	1,646	1,042
Hyderabad ..	1	Tando Jam ..	2,634	5,184	2,382	2,802
Nawabshah ..	1	Nawabshah ..	2,872	26,745	21,141	5,604
	2	Naushahro ..	3,400	3,856	3,206	650
	3	Kandiaro ..	3,013	4,195	2,258	1,937
Total ..	27		104,758	6,13,447	4,85,161	1,28,286

Statement showing by Districts, combined birth and death rates for Notified Area Committees in the Bombay Presidency during the year 1929.

Districts.	Number of Notified Area Committees.	Ratio of births per thousand of population.	Ratio of deaths per 1,000 of population				
			Cholera.	Small-pox.	Plague.	Influenza.	All other causes.
Bombay Suburban	12	15·40	..	·14	..	..	16·03
Ratnagiri ..	3	22·62	..	·15	..	..	17·98
Bijapur ..	1	40·45	..	..	..	..	30·20
Sukkur ..	4	32·33	89	..	..	..	52·30
Nawabshah ..	3	26·99	7·07	..	..	..	45·50
Larkana ..	3	21·45	6·64	·27	..	..	32·11
Hyderabad ..	1	21·53	..	..	..	..	15·00
Poona ..	1	Information not available.					
Dharwar ..	1	35·15	..	..	8·91	..	39·73
Thana ..	1	27·17	·27	..	..	..	14·00
Satara ..	1	43·66	..	..	56·22	..	82·54

No works of importance were carried out during the year except that the Santa-Cruz Notified Area Committee employed two motor lorries for removing privy cesspool water and constructed a market. Malad made improvements to wells. Vile Parle constructed Hume pipe drain at a cost of Rs. 234. The storm water drain was also improved at a cost of Rs. 616.

96. *Village Sanitary Boards.*—There are two Sanitary Boards working in the Presidency, viz., one at Siddapur in Kanara District and the other at Mandal in Ahmedabad District. Their total income including opening balance was Rs. 3,562 while expenditure amounted to Rs 2,470 leaving a closing balance of Rs. 1,092.

97. *Sanitary Committees and Village Panchayats.*—During the year there were working in all 579 Sanitary Committees and Village Panchayats.

Details of income and expenditure and of birth and death rates for the population under their administration are given in the following tables :—

Statement showing by districts income and expenditure of Village Panchayats and Sanitary Committees in the Bombay Presidency during the year 1929-30.

District.	Number of Village Panchayats and Sanitary Committees.	Total income including opening balance.	Popular contribution.	Total expenditure.	Closing balance.
		Rs.	Rs.	Rs.	Rs.
Ahmedabad	1	11,435	1,881	6,132	5,303
Kaira ..	28	44,953	12,709	23,024	21,929
Panch Mahals ..	7	13,497	7,189	8,649	4,848
Broach ..	17	40,870	12,494	21,917	18,953
Surat ..	15	22,117	7,052	14,272	7,845
Thana ..	35	49,615	24,094	34,434	15,181
Total, Northern Division ..	103	1,82,487	65,419	1,08,428	74,059
East Khandesh ..	37	2,22,035	1,14,715	1,36,334	85,701
West Khandesh ..	13	39,265	8,306	23,050	16,215
Nasik ..	26	44,010	7,254	22,816	21,194
Ahmednagar ..	18	53,947	10,100	36,522	17,425
Poona ..	18	51,182	13,594	29,020	22,162
Satara ..	15	11,970	5,989	5,373	6,597
Sholapur ..	5	9,748	..	6,818	2,930
Total, Central Division ..	132	4,32,157	1,59,958	2,59,933	1,72,224
Belgaum ..	40	60,934	13,502	32,305	28,629
Dharwar ..	44	48,658	14,516	21,442	27,216
Bijapur ..	24	36,802	8,422	16,921	19,881
Kolaba ..	19	17,913	6,772	11,189	6,724
Ratnagiri ..	2	2,245	385	1,661	584
Total, Southern Division ..	129	1,66,552	1,03,597	83,518	83,034
Karachi ..	41	39,843	6,700	17,749	22,094
Hyderabad ..	43	52,124	7,886	27,301	24,823
Larkana ..	48	49,699	10,368	27,693	22,006
Thar and Parkar ..	26	37,734	7,875	21,491	16,243
Nawabshah ..	27	38,749	7,402	21,146	17,603
Sukkur ..	17	23,536	4,887	12,413	11,123
Upper Sind Frontier ..	12	26,280	5,186	16,425	9,855
Total, Sind ..	214	2,67,965	50,304	1,44,218	1,23,747
Bombay Suburban ..	1	7,720	4,872	4,235	3,485
Grand Total ..	579	10,56,881	3,84,150	6,00,332	4,56,549

showing by Districts, combined birth and death rates in Village Panchayats and Sanitary Committees in the Bombay Presidency during the year 1929.

	Number of Village Panchayats and Sanitary Committees.	Ratio of births per 1,000 of population.	Ratio of deaths per 1,000 of population				
			Cholera.	Small-pox.	Plague.	Influenza.	All other causes.
Ahmedabad ..	3	39·88	..	·28	..	..	34·46
Kaira ..	28	36·45	..	·21	..	..	29·81
Panch Mahals ..	7	44·69	..	·47	..	..	32·33
Broach ..	20	38·04	..	·17	..	..	28·82
Surat ..	14	36·19	..	·65	·79	..	27·70
Thana ..	40	27·67	..	·69	·29	..	18·45
East Khandesh ..	37	47·64	1·89	1·04	..	..	34·09
West Khandesh ..	13	52·82	·41	·53	..	..	34·51
Nasik ..	24	50·03	1·05	1·21	2·40	..	35·98
Ahmednagar ..	28	39·43	..	·35	·01	..	25·47
Poona ..	19	30·45	..	·06	·01	..	18·60
Satara ..	26	40·20	·01	·35	8·63	..	37·16
Sholapur ..	12	32·83	·02	·14	1·06	..	26·79
Belgaum ..	42	42·08	·01	·18	4·03	..	31·91
Dharwar ..	44	40·75	·01	·62	7·31	..	36·06
Bijapur ..	31	34·56	..	·06	·59	..	22·52
Kolaba ..	21	36·95	..	·88	..	..	24·60
Ratnagiri ..	3	33·90	..	1·02	..	..	24·10
Karachi ..	41	26·92	2·62	·24	..	..	29·45
Hyderabad ..	43	26·48	·57	..	..	..	29·01
Larkana ..	49	27·98	9·09	·27	..	..	49·62
Thar and Parkar ..	26	30·15	..	..	..	..	29·92
Nawabshah ..	27	31·67	1·61	·59	..	..	40·05
Sukkur ..	17	41·76	3·24	·04	..	..	74·21
Upper Sind Frontier	12	26·59	3·66	·24	..	..	46·39
Bombay Suburban	1		Not available.				

The Assistant Directors of Public Health during their tours inspected the sanitary arrangements of the villages where Committees or Panchayats existed and their recommendations for improvements were forwarded to the Revenue Officers concerned.

Examples of useful work done by Sanitary Committees and Village Panchayats are given below :—

The Medha Village Panchayat purchased some medicines and distributed them free in order to check the spread of malaria. The Sar Panch reported that the experiment proved successful.

The Village Panchayat at Mokhada, Thana District, has been abolished since 1st September 1929 and its accounts have been taken over by the District Local Board.

The Collector of Thana remarks that most of the Village Panchayats are not doing anything towards sanitation except sweeping of roads and

lighting. There are about 10 Village Panchayats who spend amount on conservancy.

Nampur constructed a well. Pimpala, Palaskhede, gaon, Nargol, Nagothna, Bhadgaon and Lasalgaon steri

A Village Panchayat was newly created at Ashwi Bu gamner Taluka of Ahmednagar District and two Sanit one at Kharepatan and the other at Kelshi in Ratnagi abolished.

A Village Panchayat and a Sanitary Committee were new at Nagal, Ankleshwar Taluka, Broach District and at Halol Taluka, Panch Mahals District, respectively.

SECTION X.

General.

Public Health Laboratories.

98. The Poona and Karachi Public Health Laboratories continued their valuable work throughout the year. Some bacteriological and pathological work was also done at the Municipal Laboratory, Ahmedabad.

Poona Laboratory.—Dr. F. Barretto, D.P.H., was in charge of the laboratory throughout the year. A large amount of analytical work, mostly in connection with water-supplies, was carried out during the year. Routine bacteriological examination of samples from the three main supplies of Poona, viz., the Cantonment, City and Kirkee was carried on as in the past years to maintain a check on the efficiency at each stage of the process of purification. Thus :—

The samples from Poona Water-works included 265 of raw canal water, 117 filtered water and 273 of chlorinated water.

Six hundred and one samples from taps supplied from the service reservoirs were also analysed.

Raw canal water 267 samples and chlorinated tap water 275 samples, were analysed for Poona City supply.

Samples of water examined from the Pashan Water-Works were—Lake water 99, raw water 99, filtered water 103, chlorinated water 274 and tap water 34 ; while from the Holkar's Bridge, river water 108, alumed 101, filtered water 101 and chlorinated water 96 were analysed.

Two hundred and thirty-six water samples were received from various municipalities and other bodies and 254 were examined for experimental purposes. The total for the year was 4,162 samples examined bacteriologically and 6,702 chemically.

Chemical work for Poona Cantonment Water-Works included examination of 265 samples of raw water ; 117 filtered water and 273 chlorinated water ; for Kirkee Water Works 44 raw water. One hundred and seven samples from out stations were also examined.

Besides these, 1,038 samples were analysed for estimation of strength (in chlorine) of bleaching powder ; 274 for determination of dose of alum ; 302 of sewage effluent and 41 of foods and drugs.

Chlorination of Poona Water-supplies.

The finally treated water of the Poona Cantonment water-supply maintained its high standard of purity. 98·55 per cent. in the 100 c.c. and 95·75 per cent. in the 500 c.c. samples tested yielded no B. Coli. The average number of total colonies grown on Agar and Bile Salt Agar during the year for the chlorinated water was 8·35 and 0·02 respectively showing a percentage reduction of 90 per cent. and 100 per cent. on the raw canal water.

The average dose of chlorine used during the year for the Cantonment Water-supply was 0·278 parts per million parts of water.

As regards Poona City water-supply, there is no filtration carried on like other water-supplies in Poona but it is sterilized by means of chlorination alone. The results on the whole have been better—76·36 per cent. in the 100 c.c. samples yielded no B. Coli against 69·48 per cent. The percentage purification of the supply on Nutrient Agar was 89 per cent. and on Bile Salt Agar 97 per cent.

The average dose of chlorine for the year was 0·425 parts per million parts of water.

At the Pashan water-supply the purification is carried on Slow Sand Filters as in the past years. The average results of the finally treated water yielded 83·58 per cent. in 0 in 100 and a percentage purification of 95 per cent. on nutrient agar and 99 per cent. on bile salt agar.

The average dose of chlorine used was 0·549 per million parts of water.

The Holkar's Bridge Water-Works, Kirkee, which consists of Paterson Rapid Filters, worked from July to October. 95·83 per cent. of the chlorinated samples yielded 0 in 100 and the percentage purification was 99 per cent. on nutrient agar and 100 per cent. on bile salt agar. The average dose of chlorine was 0·341 parts per million parts of water.

Dr. Barretto visited Mahableshwar with a view to inspect the chlorination of the Bishop Tank which was then being started. A concrete tank for chlorine solution was erected at the Tank. The pure water reservoir and the chlorine tanks were cleaned and washed before chlorination was started and samples were tested and dose of bleaching powder estimated on the spot.

A similar chlorine Tank was constructed at the Elphinstone Tank. He tested the tank water and estimated the dose.

He proceeded to Matheran some days after his return from Mahableshwar and inspected the chlorination of the Lake Charlotte. Samples of raw water as well as chlorinated were collected at different points and from various service taps and tested on the spot. Malett Spring and other sources were also examined.

He visited Nasik and examined the water-supply there. The chlorination had been started since December 1928. The method was found to be defective and extremely unsatisfactory. Some recommendations were made as to its improvements. The Medical Officer of Health was since deputed by the municipality to the Poona Public Health Laboratory for some days and he was given instructions in the sterilization of water.

In the course of his duties he visited Pashan, Trimbak, Yeravda, Hadapsar, some of the public institutions and also private houses.

He attended the Indian Science Congress held at Allahabad in the first week of January 1929.

An investigation was undertaken with a view to test the efficiency of the Perfection Closet. Experiments were made to see within what minimum period of time, the chemical needed to be re-added to the Closet (*a*) to prevent smell, (*b*) to keep up the liquefaction of the solid matter and (*c*) to give a bacteriological result of "0 in 100" (for lactose fermenters). The Closet was used by 8 persons daily (once each) and the

Firm of Messrs. Girdhardas, Liladhar & Co., Bombay, had advised 10 lbs. chemical at the start and a fresh dose of chemical at ½ lb. per head to be added every fortnight.

As for conclusion, the effective working of the Closet under the circumstances tested (i.e., used by 8 persons, once each), it would appear that the dose of chemical needs to be renewed at the end of the 3rd week. This reduces the cost slightly than adding the dose every fortnight as advised by the Makers.

The number of samples so far tested in connection with the Perfection Closet was 108.

Two Paterson filter beds were re-graded at the Poona Cantonment Water-Works. An investigation was carried out to ascertain the time required for the filter to mature, i.e., to yield bacteriological results as good as the other filters at work.

III. As chlorinated samples received from Ahmednagar did not give satisfactory results in spite of the statement of the Medical Officer that the water in the Reservoir there gave a blue colour with potassium Iodide and starch, an experiment was carried out at the laboratory to determine if chlorinated water stored in a sterilized bottle for some days would show deterioration in results and which is likely to occur in transit.

Samples of the reservoir water (chlorinated) at the Poona Water-works were collected at start, and after 24, 48 and 72 hours. The results for lactose fermenters were 0 in 100 though the colony count was crowded after 48 hours on both agars, those on red agar being tiny white colonies.

Instructions in sterilization of water were given to officers deputed by municipalities and private individuals.

His Excellency the Governor of Bombay, accompanied by his Private Secretary, visited the Laboratory in July. His Excellency was received by the Honourable Ministers, Moulvi Rafiuddin Ahmed and Mr. Harilal Desai, the Chief Engineer, the Director of Public Health and the Superintending Engineer, Public Health. Some selected chemical and bacteriological demonstrations were put up in which His Excellency was keenly interested.

Karachi Laboratory.—Dr. G. K. Dhurandhar acted as Officer of the Chemico-Bacteriological Laboratory, Karachi, up to 27th April when Dr. Bhujanga Rao took over on his return from deputation to the School of Tropical Medicines and Hygiene, Calcutta, and continued till the end of the year.

As stated in the previous report, the two laboratories were located in two separate buildings, one at Kiamari and the other on the Artillery Maidan. The two laboratories are now located in one building from March 1930.

Karachi water supply.—The chemical and bacteriological examination of raw and chlorinated water was carried out daily as a matter of routine

throughout the year. The estimation of the dose is being carried out and reported daily by phone to the municipal Medical Officer of Health.

The liquid chlorination plant installed by the municipality is working satisfactorily. 285 samples of raw water and 751 chlorinated were examined bacteriologically and 288 of raw and 288 chlorinated water were chemically examined. Besides 302 samples were analysed for examination of strength (in chlorine) in bleaching powder.

Sukkur Water-supply.—Samples of raw, settled and chlorinated water were sent regularly every week to the laboratory for chemical and bacteriological examinations. Samples of bleaching powder were also sent. In addition to the Karachi and Sukkur Water-works, samples of water were examined for the Royal Air Force, Drigh Road. A large number of samples were also received from the Sukkur Barrage Works and various Government Officers in the mofussil, and Local Bodies also utilized the services of the laboratory. In all 1,434 water samples were examined bacteriologically and 1,332 chemically. Besides, 30 samples of bleaching powder and samples for estimation of dose of bleaching powder were also received.

One hundred and thirty-six samples of food stuffs were examined. There were 101 samples of milk, 25 of ghee and 6 of edible oils.

Four hundred and thirteen samples of chemical interest were also examined.

The work of the laboratory is expanding every year as local bodies are taking greater advantage of its services. For instance, among the numerous samples sent by the Karachi Municipality, there were 98 samples of milk, 9 of ghee, 158 specimens of throat swabs taken by the Medical Officer of Health, Karachi Municipality.

In addition to the work briefly described above, the laboratory deals with medico-legal, excise, Government miscellaneous and general analytical work. The work done during the year under report may be summarised as follows :—

I.	Medico-Legal cases including the examination of various articles	786
II.	Samples of Store Department	64
III.	,, of Excise Department	19
IV.	Miscellaneous	28

I. The Medico-Legal cases investigated during the year were forwarded from 47 different stations and are arranged in classes as under :—

Class I—Cases of suspected human poisoning.—Samples from 47 different places were received. It involved 55 persons of whom 24 died. Poison was detected in 21 cases.

Class II—Cases of suspected animal poisoning.—Two cases were examined under this class and poison was detected in one only.

Class III—Cases of suspected staining with blood.—One hundred and seventy-eight cases were forwarded for examination, of which 107 were suspected of staining with blood and the remaining 71 with semen or with semen and blood. The total number of articles examined was 602.

Class IV—Miscellaneous cases.—In all 6 cases were examined under this class.

II. *Samples from the Excise Department.*—Forty-seven samples were examined under this head and included salt, opium, liquor, etc.

III. *Samples from Government Stores.*—These included the analysis of restricted drugs. Cocaine, Morphine, etc. 28 samples were examined under this head.

IV. *Miscellaneous.*—Twenty-eight samples were examined under this head.

Fairs and Festivals.

99. *Pandharpur.*—The chief day of the Ashadhi Fair fell on 17th July 1929. The total number of pilgrims who paid the tax was 205,766 ; and there were about 7,895 exemptions.

Medical arrangements en-route.—As usual, lists of the halting places of Palkhis, with dates of arrival, were sent to the Surgeon General with the Government of Bombay for the medical arrangements en-route and also to Collectors and State Authorities, through whose jurisdiction the palkhis pass. The palkhis were inspected by the Medical Officers and the Mamlatdars. The Inspector of Sanitation and Vaccination, Nagar District, inspected Shri Nivrittinath Maharaj and Shri Muktabai (Ram) Palkhis at Nagar and accompanied the latter palkhi to the end of his charge.

Four districts were very slightly affected with cholera. The halting places of palkhis except Kurduwadi were free and the palkhis entered Pandharpur with a clean bill of health. At Kurduwadi one person returning from Pandharpur to Poona was found attacked by cholera, and was removed to Cholera Hospital and he subsequently recovered.

The Inspectors of Sanitation and Vaccination and the vaccinators treated the water-supplies with potash permanganate at the halting places and accompanied the palkhis throughout their charges.

On the 3rd July 1929, two indigenous cases of plague were reported from Lonand, the halting place of Shri Dnyaneshwar Maharaj Palkhi. Rat-dying was also notified. The palkhi was, therefore, not allowed to enter Lonand, but was made to halt outside the town.

The Assistant Director of Public Health, C.R.D., inspected the Dnyaneshwar Maharaj Palkhi at Alandi, Poona, Saswad, the Tukaram Maharaj palkhi at Akurdi, Poona and Saswad and Sopandev's palkhi at Saswad. All the palkhis were inspected at Wakhari.

Arrangements at Wakhari.—Water was taken into the masonry tank on the morning of the 4th July from the Mhaswad Tank. It was alumed and permanganated. Trenches were provided and a temporary Infectious Diseases Hospital was opened.

Arrangements at Pandharpur.—The usual medical arrangements were ready well before the pilgrims began to arrive in Pandharpur. Nine Sub-Assistant Surgeons and 17 medical students were appointed. The incoming and out-going pilgrims were inspected at the Railway station and at the Octroi Nakas. Ten Sanitary Inspectors and one Sub-Assistant Surgeon were employed to detect cases of epidemic diseases. Ambulances were provided at various important places for the removal of the sick to the hospital.

Twelve qualified Sanitary Inspectors and the usual extra staff of sweepers, scavengers, bhangis, etc., were also entertained.

Latrines.—Four sets of trench latrines on the four sides of the town were provided. Eighty-eight bhangis and 40 mangs were engaged to conserve the latrines. Guards were employed to prevent people from fouling the surroundings of the trenches.

All the refuse was promptly removed and burnt in incinerators.

Food-supply.—All the hotel-keepers were made to clean and limewash their premises before the fair. The hotels and market were frequently inspected and any unwholesome food-stuffs were immediately destroyed. The District Magistrate, Sholapur, prohibited the importation of mangoes into Pandharpur during the fair days. This order proved useful.

Water-supply.—The new oil engine has now been installed which can pump about 75,000 gallons per hour. With the installation of this no scarcity of water was felt in any part of the town though the attendance was greater than in previous years. The supply was permanganated throughout the fair days as a precautionary measure. All the wells in and around Pandharpur were also permanganated, regularly. The river bed was guarded day and night with a view to avoid contamination of water in which the pilgrims bathe and sip.

Health of pilgrims.—The health of pilgrims was good. The fair passed off without any epidemic.

At the Kartiki fair at Pandharpur which is next in importance to the Ashadhi, the attendance was 116,107. The usual additional medical and conservancy staff was employed.

A pilgrim from Pangri, Nanded District (Nizam's Dominions) who was found suffering from diarrhoea and vomitting was removed to the Infectious Diseases Hospital where he died subsequently. The contacts were given permanganated pills thrice daily for three days. The house was disinfected. No more cases occurred.

One small-pox case which was detected at the station naka, was isolated and subsequently it recovered.

Alandi.—The big day of the Kartiki fell on 22nd November 1929. The Assistant Director of Public Health, C.R.D., visited Alandi before and during the fair and made suggestions and supervised the arrangements. No cholera cases occurred.

Sanitary arrangements were also provided at Shinganapur (30,000 pilgrims) and at Shirala (22,000 pilgrims). All other smaller fair centres in the Central Registration District were free from any epidemic diseases.

In the Western Registration District, the principal fairs at Nasik and Trimbak were Nivritti in February, the Maha-Shivratra in March, the Ram-Navami in April and the Kartiki in November 1929. The number of pilgrims during these "Parvanis" varied considerably ranging from about 1,500 during the Kartiki fair to 20,000 during the Nivritti fair.

The Assistant Director of Public Health inspected the fair areas before, during and after the festivals at all odd hours and at times paid surprise visits.

The sanitary measures adopted at these fairs at Nasik included :—

The storage reservoirs, storage cisterns of the city and Indra Kund were sterilized and the usual sanitary measures, standardised during previous years, adopted.

At Trimbak chlorinated water was provided all through the day and night during festivals and public wells were regularly sterilized during the fair. The "Kushavarta", the sacred bathing tank was treated with bleaching powder every evening during the fairs and a day before the fair. The tank was emptied and cleaned four times during the year, viz., January, February, May and July.

There were 5 attacks and 4 deaths from cholera, 88 attacks and 66 deaths from small-pox and 215 attacks and 150 deaths from plague at Nasik.

There was no case of any epidemic disease at Trimbak.

Saundatti-Yellamma Fair (January, April and December) in the Belgaum District, Yamnur (March) in Dharwar District and Gokarn (March) in the Kanara District are the fairs to which people from all parts of the Presidency are drawn. The total number of pilgrims attending the fairs is about 10 to 50,000 at the Yellamma fair, 60,000 at Yamnur festival and 30,000 at Gokarn. All the wells at these pilgrim centres were sterilised during the fairs under the direct supervision of the Inspectors of Sanitation and Vaccination of the districts concerned.

The Yamnur Fair.—The temporary municipality having been abolished the sanitary arrangements in the fair area were entrusted to the District Local Board, Dharwar. In addition to their Medical Officer of Health with the subordinate staff of Sanitary Inspectors, the services of two Inspectors of Sanitation and Vaccination and three vaccinators of neighbouring talukas were lent to the District Local Board, Dharwar.

Drinking water-supply was derived from two tanks which were thoroughly disinfected with permanganate of potash and were guarded. Pilgrims were allowed to take water from 7 masonry cisterns and water taps only.

All vegetables and fruits were inspected and all rotten food stuffs were destroyed.

Twenty-eight latrines with trenches were erected. Watchmen were stationed near the latrines to see that they were used properly by the pilgrims.

Five slaughter houses were erected and each one was given in charge of a Sanitary Inspector and 2 sweepers.

Bathing pits in the Benni Nalla were disinfected and 2 watchmen were kept on each of these pits.

These fairs passed off with a clean bill of health.

The festivals at Vautha in Dholka Taluka and Shukaltirth in Broach Taluka were both held on 15th December and 16th November 1929, respectively.

The Inspector of Sanitation and Vaccination was deputed for the fair duty at Vautha. Trench latrines were provided at suitable places with an adequate staff. Wells were permanganated before, during and after the fair. The fair passed off without any outbreak of disease. About 100,000 pilgrims attended this festival.

The fair at Shukaltirth was attended by about 75,000 pilgrims. Sanitary arrangements were satisfactory and the fair passed off without any outbreak of disease.

The Manekthari Punem Fair came off on 18th October 1929. As the Municipal Authorities had failed to make adequate sanitary arrangements for the fair in view of the prevalence of cholera in the areas from which pilgrims were drawn, the Collector issued an order under Section 175 of the District Municipal Act (Bombay Act III of 1901) that the Assistant Director of Public Health should carry out forthwith the sanitary arrangements and the cost should be paid by the municipality.

New features introduced during the fair were trench latrines with arrangements for privacy for males and females, painting of dust-bins, permanganation of wells every night, instructions against drinking Gomati Tank water, enforcement of provision of sanitary requirements at the theatres, inspection of pilgrims by Medical Officers and provision of Isolation Hospital. The Assistant Director of Public Health encamped at Dakore during the fair days and conducted and supervised sanitary arrangements personally. There was no epidemic.

The services of Inspectors of Sanitation and Vaccination and vaccinators were placed at the disposal of the district officials for fair duty whenever it was possible to do so.

The Lal Shahbaz Fair at Sehwan (Sind) was held from 30th January to 1st February 1929 and was attended by about 20,000 pilgrims. The decrease in pilgrims was chiefly due to severe cold as compared with the year 1928. No Government Medical Officer was deputed on fair duty. No arrangement for the medical inspection of pilgrims was done at the Railway station. The municipal Dispensary was kept open for the treatment of pilgrims.

The Inspector of Sanitation and Vaccination, Karachi District, was deputed to Sehwan on special duty in connection with the fair. He was in charge of the sanitation of the town. The water-supply was from wells and Aral Canal. The supply was maintained continuously day and night. The Inspector with the assistance of the municipal Secretary sterilized all the wells used by pilgrims for drinking purposes.

No cases of infectious diseases occurred during the fair.

The Assistant Director of Public Health was present during the fair.

Sanitary Associations.

100. There were 10 Sanitary Associations working in the Presidency. All continued to do useful work as the following examples show :—

Karachi Health Association.—The Association maintains a Maternity Home named after Mr. Bherumal Thakurdas. This institution is reported to be gaining in popularity every year. During the year under report, 851 maternity cases as compared with 742 were conducted by the Association Midwives and supervised by Lady Health Visitors.

There were 6 midwives in charge of different quarters of the City. 4,323 house to house visits were paid by the Lady Health Visitors for the purpose of supervising maternity cases and giving advice on the care and nurture of infants.

In the Bherumal Thakurdas Maternity Home 613 mothers availed themselves of the facilities provided, an increase of 59 cases over the last year. Of the 613 labour cases, 26 were abnormal labour, 22 complete abortions, 27 incomplete ones and 98 threatened abortions were treated free of cost. It is a matter of regret that 42 children died of whom 8 were prematures, 16 still-births and 18 babies died within first five days, 220 antenatal cases were treated for various disorders. The midwives conducted 765 labour cases in the different quarters of Karachi. Two cases proved fatal 11 children died within ten days of birth. Out of the labour cases mentioned, 515 were attended to free of charge and from the rest a nominal fee was received ; six cases were brought to the notice of the midwives and Health Visitors.

At Hyderabad, the training of native "Dais" in maternity work was continued under the guidance of Miss Piggott whose organization has been extended to nine centres. During the year under report 72 Dais were under supervision. Seventeen Dais appeared for the examination and all passed ; 63 were under training ; 102 midwifery cases were superintended. 6,120 women attended the lectures and 41 villages were visited.

The outstanding event of the year was the Conference of Dais held at Hyderabad on 21st November 1929. This was the first of its kind in Sind. It coincided with the visit of Their Excellencies to Hyderabad and Lady Sykes addressed them after distributing certificates to successful students. Sixty-nine of them were present, and 7 arrived late. The most important subject discussed was the bill for the registration of Dais which is before the Bombay Legislative Council. The bill was unanimously

passed in 1929 and in the Conference of Dais held at Hyderabad, and it was agreed that it should come into force.

Red Cross and Health Societies, Hyderabad.—The activities of this Branch were mainly directed towards maternity and child welfare work.

Mrs. Hamid Ali Red Cross Maternity Home, Larkana.—During the year under report 118 cases were conducted out of which 94 were in-door and 24 out-door. Not only maternity cases but gynaecological cases were also treated. 3,562 in-door and out-door cases were treated. Owing to the ravages of floods, the Home could not carry out any health propaganda except issuing pamphlets on cholera.

In the Ishwarbai Maternity Home at Shikarpur, 461 cases were conducted, 391 inside the Home and 70 outside.

The Broach Sanitary Association has a long list of useful work performed during the year to its credit.

The Demonstrator of the Association delivered 17 short lectures on health subjects with the aid of magic lantern in the city, and 4 in the district. He also delivered 20 lectures in the city and 8 in the district explaining the illustrated charts on different health subjects.

The Association published and distributed leaflets on malaria, care of the eyes, etc., prepared posters on maternity and child welfare and organized ambulance classes and arranged to analyse the various samples of milk sold in the city by Dr. Garber's machine through the help of the Deputy Director of Agriculture, Surat, and 50 samples of milk so far were examined.

A Health Show was also held at the *shukaltirth* Fair. It distributed 18,500 quinodine tablets in 153 villages through the agency of school masters and the Mamlatdar of Broach Taluka and 2,914 tablets were distributed in the different parts of the City. In co-operation with the local Red Cross Society the Association extended medical relief to 62 centres in the district and 3 in the mill area of the city. 34,998 patients took advantage.

The Surat Sanitary Association delivered five cinema lectures at different places in the city. The Secretaries and members of the Managing Committee who took active part in the celebration of the local Baby Week rendered valuable help in furthering the cause of vaccination propaganda of the municipality.

The Ahmedabad Sanitary Association organised 52 magic lantern lectures in different parts of the city. In these lectures, slides in maternity and child welfare, water-borne diseases, cholera, house-fly, tuberculosis, malaria, small-pox and temperance were exhibited. In addition to these three lectures were organised for the benefit of the school children—these, one being on "Dangers to Health.". About 5,000 leaflets on plague, influenza and child welfare were distributed during the demonstrations.

The Red Cross Society, Belgaum Branch.—225 antenatal cases, 396 infants and 450 toddlers, 854 post-natal were visited by the Superintendent of the Society. A good deal of educative work was done by the Travelling

Dispensary started by the Society in rural areas. 905 village officers, Circle Inspectors, Police Officers, etc., were trained in water-supply and local treatment of snake-bite with potassium permanganate. Lantern lectures on "Guinea-worm" and "Ill Effects of Opium" were given.

The Dharwar Sanitary Association has been merged into local branch of the Red Cross Society. It carried on educative propaganda work in the district by organizing Baby Weeks and Health Shows, the expenditure being met by popular contributions. A dozen shows were arranged for in all. Nine Red Cross midwives were working in the district. Of these, one was attached to the Maternity Hospital at Dharwar as Health Visitor. The total number of maternity cases attended to by the midwives was 157.

The Maternity Hospital was in charge of a Lady Assistant Surgeon attached to the Civil Hospital. There were 92 cases treated in the Hospital and 71 outside cases were attended to by the Red Cross midwife and the district nurse.

The Red Cross Committee at Bijapur established a Women's Health Union as a branch of the Red Cross. The appointment of a Health Organizer for rural health is under consideration of the Committee.

The Bombay Sanitary Association did good work during the year under report. Dr. D. S. Bhandarkar continued to act as a part-time lecturer in Hygiene.

The Lady Wilson Village Maternity Association, Poona.—During the year the efforts of the Association were directed more towards consolidation than extension.

In the Bombay Suburban District, Dr. Sunawala, Honorary Secretary of the Association took very keen interest in the work. He distributed 20,000 leaflets in English and in Marathi explaining in full the advantages of the scheme.

At the Poona centre 20 Dais were sent up for training. The total number of Dais trained at the centre was 239. Dais were also trained at Pandharpur, Karwar, Dharwar and Bijapur centres.

Thirty-five Dais were trained at Sholapur. Out of these 20 came out successful. The training given to the city Dais was somewhat more elaborate than contemplated by the Association, the period of training given extended over six months. Classes were held once a week and as an inducement the Dais were paid two annas each for every class attended.

The District Committee, Thana, trained fifteen Dais, eight at Kalyan, six at Murbad and one at Vada. The instructions consisted of 12 lectures. In order to attract Dais, eight annas per day was given to those who came from villages away from headquarters of the taluka.

New Committees were constituted in Panch Mahals, Broach, Surat, Belgaum, Dharwar, Nasik, Satara, West Khandesh and Bombay Suburban district.

Government as in the previous year sanctioned a sum of Rs. 10,000 to be given towards grants-in-aid for these centres, but the condition that the grant in each case should be limited to one-third of the total expenditure has been waived for the year 1929-30 also.

On the whole, it is gratifying to note that the progress of the Association has been encouraging.

Training classes for indigenous Dais were held in the Civil Hospitals of Belgaum, Dharwar and Karwar. Three Dais were trained in Belgaum Civil Hospital, of whom one was from Parasgad taluka and the other two were from Belgaum town. The period of training of village Dais who were already in profession was six weeks. A sum of Rs. 45 was given by the Collector of Belgaum out of the Lady Wilson Maternity Association.

In the Dharwar Civil Hospital, twelve Dais were trained—three from rural areas and nine from Dharwar and Hubli towns. A scholarship of Rs. 10 each was given, the period of training being three months. One Dai was trained in the Civil Hospital, Karwar.

Other Associations worked according to the indications of local requirements and opportunities.

Health and Baby Week.

101. The Health and Baby Week movement made further progress in the Presidency, celebrations being held in many important towns.

The Assistant Directors of Public Health helped in the work of organization and gave lectures and demonstrations.

In Sind Registration District, Baby Weeks were held at two places, viz. at Nawabshah and Shikarpur.

At Nawabshah, the Baby and Health Week was celebrated under the auspices of the Nawabshah Branch of the Red Cross Society on the 8th and 9th April 1929. The prize distribution ceremony was performed by Dr. Advani, Dr. Gulabrai, Medical Officer of Health, Hyderabad, and Miss Naraindas who was deputed by Miss Piggott to attend the Week on her behalf owing to her indisposition. Sixteen prizes varying from Rs. 10 to Rs. 5 were given to babies according to merits. Magic lantern lectures on small-pox, tuberculosis and malaria were delivered. Pamphlets on Public Health subjects were freely distributed. Cattle and Agricultural Shows were also held on these dates. At Shikarpur the Health and Baby Week was celebrated from 27th April to 3rd May 1929. The opening ceremony was performed by Mr. J. R. Hood, Collector of Sukkur. The municipality contributed Rs. 800 towards the expenses.

In Gujarat Registration District, the Baby Week was celebrated in Ahmedabad City from 13th to 15th December 1929. The Assistant Director of Public Health attended it on 15th and helped in selection of babies for prize distribution.

In Broach City the Show was held from 31st December 1929 to 2nd January 1930. Among other items the celebrations consisted of Health Procession, lectures, songs, physical feats and cinema shows. The magic lantern lectures and cinema shows were given in the Government High School compound and the Health Exhibition was held in the J. D. Vakil Sanitary Museum and the Middle School in 20 different health sections.

In Surat City, the Week was celebrated from the 18th to 28th April 1929.

The Ahmedabad District Local Board sanctioned a sum of Rs. 150 for Baby Week activities in rural areas and handed over the sum to the Honorary Divisional Secretary, Gujarat and Baby Weeks were organized at six places, viz., Chhanior, Patri, Godhani, Bavla, Sarkhej and Vatwa.

In September 1929, Kapadvanj Sewa Sangha organised Baby Week in Kapadvanj for three days.

In the Central Registration District, the Poona Seva Sadan arranged, in April, a small Health Exhibition and a three-day Conference at Poona for the special benefit of the 800 primary school teachers—male as well as female—who had come there to attend the Diamond Jubilee Celebration of the Training College for Men. The Conference discussed ways and means of conducting health education in primary schools and sanitary propaganda in small villages particularly.

In December 1929, Mr. G. K. Deodhar, C.I.E., M.A., with the hearty co-operation of the staff of the Agricultural, Co-operative, Industrial, Educational and Health Departments of Government and Mrs. Jankibai Bhat organised on a modest scale an agricultural, co-operative and educational exhibition at Khed-Shivapur (Poona District) as the first step in the direction of rural uplift to facilitate the spread of the movement. A health, maternity and Child Welfare Section coupled with programmes of health dramas (performed by the girl students of the Poona Seva Sadan) and cinema shows formed a most attractive and prominent feature of the exhibition.

In the Southern Registration District, 17 Baby and Health Week shows were celebrated as against 38 in 1928. Out of this number, the Red Cross Society of the Dharwar District managed to arrange for about a dozen shows in the rural areas under the presidencies of high Revenue Officials.

Dr. S. P. Kumbhakonum, Honorary Divisional Secretary for Karnatak, organised in November a big Health and Child Welfare Exhibition at Hubli and a Conference of health workers in the Karnatak Division. The exhibits were collected from various sources in Bombay, Poona, Ahmedabad, Broach and Belgaum and arranged in 27 sections in 17 large rooms opening into a big quadrangle. The exhibition was opened by His Excellency the Governor of Bombay. The Health Conference which was attended by nearly200 health workers and doctors, was inaugurated by Lady Sykes, the President of the Association. These

were exhibited, in all, 273 models, instruments and other apparatus and 608 posters practically all of which were translated into Kanarese. The Medical Demonstrator of the Association who was sent out from Bombay trained nearly 100 volunteers and supervised their work when they were posted on the stalls for the purpose of explaining the exhibits to the visitors and answering their queries. It is estimated that nearly 90,000 people visited the exhibition and attended the various programmes of lectures and cinema shows that were going on for nine days.

The adjourned Public Health Conference again met on 6th November 1929 in Hubli under the presidency of Dr. K. A. Gandhi, D.P.H., Assistant Director of Public Health, Southern Registration District, and the following subjects were discussed :—

(1) Infant welfare centres and health visitors.

(2) Medical inspection of schools.

(3) A paper on Public Health and Co-operation by Dr. J. D. Munsiff, D.P.H.

(4) Anti-Venereal League work in Criminal Tribes Settlement.

(5) Necessity of prompt and thorough measures to prevent epidemics.

The following Resolutions were also passed :—

(1) To start as nucleus for maternity and infant welfare work, infant welfare centres and qualified health visitors for all District Local Boards and Municipal Boroughs,—the Hubli Municipal Borough taking the lead.

(2) To start Anti-Venereal Clinics in places wherever possible and that special attention be paid to educate ignorant men and impress upon them the value of a moral life with a view to improve public health.

Health of Industrial Workers.

102. The Assistant Directors of Public Health continued their inspection of factories (under the Act of 1911) in the course of their tours submitting copies of their reports to the Managers and Chief Inspector of Factories.

The Assistant Director of Public Health, Sind Registration District, inspected the following factories, viz., the Assandas Kundomal and the Ajumal Jagatrai Ginning factories at Tando Kaisur (Hyderabad District) and at Hyderabad respectively and also the Rally Brothers Bone Crushing Mill at Karachi.

The Assistant Director of Public Health, Gujarat Registration District, inspected six factories in Broach and Ahmedabad districts. Of these four were cotton ginning factories and two cotton spinning and weaving situated in Broach and Ahmedabad towns respectively. The factories were no doubt located in or near inhabited areas and the accommodation was sufficient. Water for drinking purposes in the mills of Broach town is derived from wells and bores and distributed through pipes. Latrines

are provided in all factories but in some cases their condition was far from satisfactory. Receptacles were recommended to be provided where they were not. Urinals are provided in large factories.

Latrines on automatic flushing system were provided in the advanced mills but in the Jehangir Vakil Mills there were surface latrines, excreta being removed by sweepers. They should be of flushing and septic tank type as in Advance Mills.

The refuse from the compound of the factories was recommended to be removed outside the compound and burnt there and covered over with earth in some cases.

The chemicals used in the laundry in the Jehangir Vakil Mills gave out bad odour which required to be controlled and rendered harmless by suitable devices.

Except in the case of large factories (Mills) some quinine was stocked and it was reported that outside medical aid was procured in case of need. There is a dispensary attached to the Advance Mills. The average daily attendance was 17 in slack season and 40 in busy season. There is also a dispensary attached to the Jehangir Vakil Mills where the equipments were found very dirty. A part-time doctor attends it from 3 to 6 p.m.

Creches are attached to both the mills in Ahmedabad. There is a library and a school for half time workers in the Advance Mills, the average attendance being 24 (12 boys and 12 girls).

The Jehangir Vakil Mills chawls for residential workers are far from general sanitation.

In addition to above the Assistant Director of Public Health inspected 19 mills in Ahmedabad and Broach with a view to ascertain the general prevailing conditions that tended to the prevalence of phthisis.

The Assistant Director of Public Health, Western Registration District, inspected twelve factories, viz. three at Pachora, three at Shendurni, two at Jamner and four at Jalgaon.

The Assistant Director of Public Health, Central Registration District, inspected the Phadke Textile and Industrial Work Ltd., at Karad in Satara District. He recommended that the drinking water supply should be stored in "Earthen Ghadas" filled with taps and covered to prevent people from dipping pots. The well in the compound should be closed.

The Assistant Director of Public Health, Southern Registration District, inspected seven factories all seasonal. The business carried on was cotton ginning and pressing. At the Saraswati Ginning factory, Khandesh Mills, Mahalingswami Kanabargi Math Brothers at Bail Hongal and The Desai Ginning, the co-operative Ginning and Coronation factories at Gadag and at Dharwar respectively, light and ventilation were defective. In almost all factories conservancy and sanitary arrangements are defective, and arrangements for drinking water not satisfactory.

None of the factories except at Ahmedabad inspected by the Public Health staff had any welfare scheme for its work people.

Floods in Sind.

103. The usual rainfall in Sind varies from 2 to 5 inches. Last year, however, there was unprecedented rainfall and as much as 51″ were recorded in some districts. The whole of the province is very flat with practically no fall to ensure drainage. Consequently the whole country side was flooded damaging crops, houses, etc. To crown the calamity, by the end of August, the glacial dam at Shyok burst increasing greatly the volume of water coming down the Indus. Breaches of the river and the canals were considered to be inevitable.

Refugee camps were opened at Hyderabad, Dadu, Sukkur and Rohri and fully equipped with drugs, vaccine and personnel as it was expected that all communications would be cut off. This had to be done within 48 hours before the waters reached Sukkur.

By strengthening the river and canal bunds and maintaining continuous watch along the banks of the river the area flooded was much less than was anticipated.

The following talukas were most affected by floods :—

District.	Talukas.
Sukkur ..	Ghotki, Pano Akil, Ubauro, Rohri, Mirpur Mathelo.
Larkana ..	Sehwan and Dadu.
Karachi ..	*Manjhand and *Kotri.
Nawabshah ..	*Kandiaro, *Sakrand and *Nawabshahro Feroze.
Hyderabad ..	*Tando Bago, *Badin, *Tando Allahyar, and *Hala.
Thar and Parkar ..	*Mirpurkhas, and *Jamesabad.
Upper Sind Frontier ..	*Kandkot, *Kashmore and *Shahdadkot.

(*These had also floods due to heavy rains.)

As the wells were submerged the drinking water was contaminated and intestinal diseases prevailed to a large extent.

Personal proceedings.

104. The activities of the officers in charge of the Public Health Laboratories are detailed above.

Supervising staff.—The following table shows the various officers who held the appointments of Director and Assistant Directors of Public Health

and the Director, Vaccine Institute, Belgaum, during the year under report :—

Appointment	Name	Period	Remarks
Director of Public Health.	Lt.-Col. H. M. H. Melhuish, D.S.O., I.M.S.	1st January to 25th February 1929.	
	Dr. J. D. Munsiff, M.R.C.P., F.R.C.S., D.P.H. (Edin.).	26th February to 31st December 1929.	
Assistant Director of Public Health, W. R. D.	Dr. R. K. Mhatre, D.P.H.	1st January to 31st May 1929.	
	Lt.-Col. K. G. Gharpurey, I.M.S.	1st June to 20th November 1929.	
	Lt.-Col. A. G. Tresidder, C.I.E., I.M.S.	21st November to 31st December 1929.	He was relieved by Major A. Y. Dabholkar, I.M.S., on 14th January 1930.
Assistant Director of Public Health, C. R. D.	Dr. Accacio da Gama, D.P.H.	1st January to 25th July 1929.	
	Dr. R. V. Shiveshwarkar, D.P.H.	26th July to 31st December 1929.	
Assistant Director of Public Health, Southern R. D.	Dr. J. L. Pinto, D.P.H.	1st January to 5th March 1929.	
	Dr. J. B. Mama, D.P.H.	6th to 27th March 1929.	
	Dr. K. A. Gandhi, D.P.H.	28th March to 31st December 1929.	
Assistant Director of Public Health, G. R. D.	Dr. K. A. Gandhi, D.P.H.	1st January to 25th March 1929.	
	Major R. H. Candy, I.M.S.	26th March to 14th August 1929.	
	Dr. S. A. Talib, D.P.H.	15th August to 31st December 1929.	
Assistant Director of Public Health, Sind R. D.	Dr. R. V. Shiveshwarkar, D.P.H.	1st January to 8th July 1929.	
	Lt.-Col. I. D. Jones, I.M.S.	9th July to 31st July 1929.	
	Dr. Accacio da Gama, D.P.H.	1st August to 31st December 1929.	
Director, Vaccine Institute, Belgaum.	Dr. J. B. Mama, D.P.H.	1st January to 31st December 1929.	

The Assistant Directors of Public Health visited 594 towns and villages during the year making reports to the local authorities as usual. Dispensaries, schools, police lines, factories, proposed sites for Government buildings, etc., were inspected ; courses of lectures in hygiene and public health were delivered to students at the Medical Schools of Poona,

Ahmedabad and Hyderabad (Sind) and the students of the Police Training School at Nasik.

The Assistant Director of Public Health, Western Registration District. Complete surveys of 17 towns, Sanitary Committees and Village Panchayats were made; 10 towns were visited for general advice; 13 towns and villages for sanitary purposes and 115 for vaccination purposes. The Inspectors of Sanitation and Vaccination made remarks in 9 Sanitary Inspection Books.

He gave opinion on 14 reports of water analysis received from different parts of his Division, inspected 13 school sites, 3 sites for night-soil depôts and one for a market. He visited 14 Dispensaries, one Ayurvedic Dispensary and inspected 12 factories. He delivered lectures and demonstrations on Hygiene to the students of the Central Police Training School, Nasik.

He visited the Jamda Canals in East Khandesh district in connection with supplying canal water within ¼ mile limit. He paid special visits to Chalisgaon, Warangaon (Bhusawal Taluka) in connection with drainage schemes. He visited Malegaon to advise the Municipality to undertake rat destruction campaign and anti-plague inoculation. Meetings were arranged in most places with local authorities for discussing the measures necessary in the affected places.

The Guineaworm Research Work in Kolaba District which was continued under the supervision of the Assistant Director of Public Health was terminated by the 31st May 1929.

Interviews with heads of Local Bodies, heads of Districts and other Government officers, Provincial Secretaries of the National Baby Week, Bombay Presidency, were included among the activities.

Classes for Village Officials were held by the Inspectors of Sanitation and Vaccination during the monsoon. Four thousand seven hundred and twenty-four Village Officers and 942 Talatis attended the course.

The Assistant Director of Public Health, Central Registration District, rendered advice on public health matters in the case of 10 towns, 1 Notified Area Committee, and 7 Village Panchayats. He also visited 89 towns and villages for sanitary purposes and 53 for vaccination purposes. He wrote remarks in 4 Village Sanitary Inspection Books while the Inspectors of Sanitation and Vaccination in 20.

The Assistant Director of Public Health attended meetings of the District Committees of the Lady Wilson Village Maternity Association at Poona, Satara and Sholapur. During his tour he held meetings of the citizens of Vengurla, Charegaon, Umbraj (Karad Taluka) and Are in Guhagar Peta and explained the scheme. He also attended Health and Baby Week celebrations in Bombay, Poona and Khed Shivapur.

The activities of the Assistant Director of Public Health in connection with plague were as follows:—

While at Mahableshwar from the 2nd April to the end of May the Assistant Director visited Menawali in Wai Taluka and inoculated

34 persons. He also visited Wahagaon, Vaduj, Mayani, Karad, Atke, Panchgani, Dandeghar, Ruighar, Kondhawali, Wai and Andori to trace the origin of plague outbreak.

Dr. da Gama attended the National Baby Week in Bombay and appeared for the language examinations in Marathi and Hindustani and passed in both.

Dr. R. V. Shiveshwarkar visited Shiwatakrar, Pandhare where special inoculation campaigns and discussions as regards other preventive measures against plague were held with the Revenue Authorities. He was also specially deputed to Kolhapur, Miraj and Sangli in connection with the visit of His Excellency the Viceroy in view of the prevalence of plague at the instance of the Political Department. After careful survey lasting four days a detailed report was submitted for the information of His Excellency the Governor of Bombay in which details of the programme of His Excellency the Viceroy were discussed and suggestions for alterations were made which were subsequently adopted.

He inspected Lonand, Satara District, in view of its potentiality for conveying plague to other places in Satara and Poona districts.

The Director of Public Health deputed the Assistant Director of Public Health, Central Registration District, to meet the Malaria Commission of the League of Nations which was touring in this Presidency. He met them in Bombay and arranged to take them to Thana and discussed with them the programme of visit and places of interest from a malarial point of view. A meeting was held at the Collector's bungalow at which the Civil Surgeon and the representatives of the District Local Board, Thana Municipality, and the prominent local medical men were present.

The Commission was then taken round to the Kopri Colony and to some breeding grounds in borrow pits. A spleen census of children was then taken on the outskirts of Thana and in the centre of the town and Major Marjoribanks' observation that there was less of malaria in the centre than on the outskirts was confirmed.

The Commission was then taken to seven villages selected for their peculiarity in point of spleen census or anopheline and ending with Ghodbunder where a considerable catch of anophelines was made which in spite of containing all the carriers of malaria showed a very low incidence of malaria. The Commission was then conducted back to Bombay. All the arrangements for them were made in co-operation with the Revenue and Local Board officials.

In addition to the usual four big fairs at Pandharpur, viz. Ashadi, Kartiki, Maghi and Chaitri, he attended the fairs at Shingnapur, Alandi and Dehu and inspected sanitary arrangements.

He selected four sites for schools, two for burial grounds, two for police lines, three for septic tanks, one for latrines. He also visited 4 Dispensaries.

He visited Warje in connection with perennial irrigation.

He delivered lectures in Hygiene to the students of the B. J. Medical School, Poona.

The Inspectors of Sanitation and Vaccination, Ahmednagar, Satara Northern Division and Southern Division and Sholapur districts held classes for Village Officials at 32 villages. 1,265 Patels and 479 Talatis were pesent.

The Assistant Director of Public Health, Southern Registration District.—Complete sanitary surveys of five towns, four Sanitary Committees and four Village Panchayats were carried out. The Assistant Director visited 132 towns and villages for the inspection of sanitation and in connection with plague and cholera and 104 for vaccination purposes. He entered remarks in 11 Sanitary Inspection Books and the Inspectors of Sanitation and Vaccination in 129.

He inspected two sites for burial grounds, 3 for village extension, one for dispensary, two for night-soil depots, two for sinking wells, two for police lines and one for Criminal Tribes Settlement. He attended 6 fairs and also inspected seven factories.

The Assistant Director of Public Health went round the infected localities in Belgaum, Dharwar, Hubli, Navalgund and Nipani towns with the Director of Public Health, arranged informal meetings of Municipal Councillors and local medical practitioners and discussed the situation in the respective towns. He also went round with the Surgeon-General and showed him the infected localities in Belgaum town.

Six villages and towns in Kanara District and four in Belgaum District were visited by the Assistant Director in connection with anti-cholera measures. He conferred with the Mamlatdars, Presidents and Councillors of the Honavar and Bhatkal Municipalities and the Civil Surgeon, Karwar. In the Belgaum district he visited the villages of Margankop, Kacholli, Ambadgatti and Hunshikatti with the Mamlatdar of the Taluka and gave demonstrations to the public.

He inspected the proposed sites for night-soil depôt for Hubli town and Survey Nos. 21 and 22 of Bamapur were approved. Construction of a well on the site to cleanse the night-soil carts was also recommended.

He approved of the site for night-soil depôt at Ranebennur.

He inspected the water-works at Dharwar with Dr. Talib and showed him round. He was also taken round to Bharat Mills at Hubli. He also inspected the water-works at Unkal.

He inspected the stock of quinine in the Post Office at Manoli. Quality of quinine examined was found to be good.

He visited the Village Aid Post at Kolhar, taluka Bagewadi, and passed remarks in the Visitors' Book. It was noticed that the Village Aid Post was serving a useful purpose.

He attended the Baby Shows at Nipani and Nargund and also the Hubli Provincial Shows.

Regular annual classes of Patels were held at the district head-quarters of Belgaum and Dharwar by the Revenue officials and the Inspectors

of Sanitation and Vaccination were directed to deliver lectures on "Village Sanitation", "Personal Hygiene" and cause and prevention of infectious diseases on the days and hours fixed for the purpose. 2,145 patels and 969 talatis received instructions in these classes. The Mamlatdars and Mahalkaris, Members of the Taluka Local Boards and Panchayat Committees, Sub-Inspectors of Police, and staff of the Mamlatdars' offices, etc., were present at these classes whenever it was convenient for them.

The Assistant Director of Public Health, Gujarat Registration District.—Complete sanitary inspection was made of seven municipal towns and four Village Panchayats and Sanitary Committees. Thirty-six towns and villages were visited for sanitary purposes and 51 for vaccination purposes. He entered remarks in 12 Sanitary Inspection Books while the Inspectors in 59.

He inspected two dispensaries, one rain-gauge, 12 sites for schools, 5 for police lines, one for dispensary, one for urinal, one for cemetery, 6 factories and 8 for other purposes. Opinion was given on 14 reports of analysis of water samples.

Dr. Talib was deputed to the Haffkine Institute, Parel, for a period of three weeks to undergo a course of training in the identification of Indian anophelines before he could undertake the Malaria Survey of Matar Taluka.

He attended the Manekthari Punam fair at Dakore and carried out the sanitary arrangements in connection with the fair in accordance with the order of the Collector of Kaira as the Municipal authorities had failed to make adequate provision.

He attended the Baby Week Celebration at Broach. He delivered the usual course of lectures and demonstrations in Hygiene to the students of the Medical School, Ahmedabad.

In 23 villages recommendations were made to the local authorities concerned and remarks were made by the Assistant Director of Public Health and the Inspectors of Sanitation and Vaccination in the Sanitary Inspection Books urging the necessity for assigning separate plots for the storage of manure or the removal of the same from the surroundings of sources of drinking water supply.

In all villages visited the Birth and Death Registers were scrutinised, checked and remarks entered in the Epidemic Registers of small-pox, plague, cholera and influenza. Vaccination registers where available were also inspected.

The inspection of certain mills in Ahmedabad was undertaken with a view to ascertain the incidence of phthisis among the mill population. He discussed the question of malaria in Matar Taluka with the Collector and the Civil Surgeon of Kaira.

The Inspectors of Sanitation and Vaccination held classes during monsoon for village officers. 912 Patels, 353 Talatis and some Municipal and Local Board servants attended them.

The Assistant Director of Public Health, Sind Registration District. inspected the sanitary condition of 22 towns and villages. He also visited 16 towns and villages for other sanitary purposes and 28 villages for vaccination purposes. During the course of his tour he examined 1,418 school children of whom 597 were found with enlarged spleens. Necessary instructions were given to the school-masters for treatment of the school children having enlarged spleens with quinine.

He gave opinion on 29 reports of the analysis of water samples. approved 6 sites for schools, 2 for wells, one for market and one for slaughter house and inspected 2 factories.

He inspected site for the extension of the Police Thana at Hala at the request of the District Superintendent of Police.

He visited the District Prison, Karachi, in connection with pneumonia and attended its meetings.

He visited Mirpurkhas to inspect the site for drainage. He inspected the site of a Musafirkhana to be converted into a Primary School.

Dr. Shiveshwarkar appeared for the colloquial Hindustani and Sindhi examinations and passed both of them.

He gave a course of lectures and demonstrations in Hygiene to the students of the Medical School at Hyderabad.

The Assistant Director of Public Health investigated the cause of outbreak of cholera at Tando Allahyar, Nasarpur, Larkana and Shikarpur. He too delivered lectures on Hygiene to the medical students, Hyderabad, and inspected the Bone Crushing Factory of Ralli Brothers at Karachi. He supervised the sanitary arrangements at the Flood Refugee Camps at Sehwan, Rohri, Sukkur, Hyderabad, Pad Idan and Chhor.

He saw the Director of Public Health on his arrival in Hyderabad and accompanied him to Nawabshah where he called a meeting of the local officers with a view to impress upon them the necessity of organising preventive measures to check the spread of cholera. He also inspected the work of Medical Officers on cholera duty.

He saw the Health Officer of the Lloyd Barrage Township, and the Health Officer and the President, District Local Board, Sukkur, and the Chairman, Executive Committee, Sind Flood Relief Fund, Karachi, with a view to investigate the prevalence of Sand-fly fever.

He inspected Loco Quarters and visited Rohri town in connection with sanitation and also attended the meeting of the General Board, Shikarpur Municipality, to devise means for reducing high mortality.

He visited Kandiaro, Nawabshah and Sakrand in connection with the general health conditions of the people and discussed with the Collector and the Medical Officer, Nawabshah District, regarding the drainage of the flood water.

He also visited Shikarpur, as desired by the Commissioner in Sind, to investigate the cause of high mortality and to examine water-supply jointly with the Officer in charge Chemico-Bacteriological Laboratory, Karachi.

He re-organised the work of Medical Officers on anti-malarial duty in Sind.

During the year under report the Assistant Director maintained a stock of 2,020,000 quinine pills of 5 grains each and 200,000 of 2 grains each. Out of this 1,522,000 pills of 5 grains and 24,000 pills of 2 grains each were distributed among various Departments. 64,323 tablets and 162 powders were distributed by Inspectors and Vaccinators in 1,926 villages among 6,035 persons against 11,608 tablets and 400 powders distributed by them in 654 villages among 1,774 persons in 1928. The services of the Inspectors of Sanitation and Vaccination were utilised for free distribution of quinine in malarious tracts, and also for carrying out preventive measures against cholera. They inspected the sanitary condition of 34 villages and examined 1,895 children in 66 schools of whom 476 were found with enlarged spleens.

Lists of omissions in Birth and Death Registers for 793 births and 12 deaths not recorded by Tapedars were received from Vaccinators. The lists were forwarded to the Collectors for necessary action. The Tapedars at fault were warned and the entries were ordered to be made in the Birth and Death Registers.

Inspection work of the Assistant Directors of Public Health and Inspectors of Sanitation and Vaccination.—The Assistant Directors of Public Health inspected 16,290 (or 1·78 per cent.) vaccinated persons, in 415 towns and villages and travelled 35,837 miles. The Inspectors of Sanitation and Vaccination inspected 170,872 persons in 7,330 towns and villages travelling 103,359 miles. Thus the results of 187,162 vaccinations or 20·46 per cent. of the total number performed were checked by examination. The success rate of primary vaccination as ascertained by the Assistant Directors of Public Health was 99·15 and by Inspectors 97·08.

The Director of Public Health for the Government of Bombay.—Thirty-five towns and villages were visited in connection with water-supply, drainage, investigation into the causes of epidemics and general sanitation.

He visited Mahableshwar with a view to organize preventive measures against plague.

He inspected the Guinea-worm Research Work in Kolaba District and submitted a report to Government as to its discontinuance with effect from 31st May 1929.

He also inspected the water-supply at Mahableshwar, Hyderabad, Sukkur, Karachi, Nasik, Trimbak, Alandi, Sholapur, Surat and Ahmedabad.

He attended the meetings of the Central Jail, Yeravda.

He visited Sind in August 1929 to investigate the causes of high mortality from cholera there. He drew up a scheme for conducting a campaign against cholera and also held meetings of the local bodies with a view to discuss and to adopt preventive measures against the epidemic.

He again visited Sind in December in connection with incidence of malaria.

He was a member of the Malaria Advisory Committee, Bombay City, and Anti-malaria Committee and also of the British Empire Leprosy Relief Association (Indian Council), Bombay Presidency Branch. He was a member of the Executive Committee of the Bombay Presidency Baby and Health Week Association and attended their meetings.

He was a Fellow of the College of Physicians and Surgeons, Bombay.

He was the Secretary of the Central Council of Health, Maternity and and Child Welfare Associations.

It is a matter of deep regret that the Public Health Department has sustained a great loss owing to the untimely death of Dr. J. D. Munsiff on the 3rd March 1930. He was appointed to officiate as Director of Public Health and subsequently confirmed in the post. Government have recognised his meritorious services in a special Government Resolution.

ACCACIO DA GAMA,
L.M. & S., D.P.H., D.T.M. & H. (Cantab.),
Offg. Director of Public Health.

Poona, 29th September 1930.

APPENDIX I (*a*).

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF BOMBAY FOR THE YEAR ENDING 31ST DECEMBER 1929.

I—Summary.

The following summary shows the inspection and disinfection work done in the Port of Bombay in connection with out-going and in-coming vessels as well as those lying in the harbour and docks during the year ending 31st December 1929.

Eight hundred and fifty-five vessels of all classes with 190,483 crew and passengers were examined during the year.

The clothing, bedding, and other articles of 62,149 members of crews and passengers of out-going and in-coming vessels and of members of crews of vessels lying in the port were disinfected. Of these 50,497 were Asiatic and African members of crews, third class or deck European and Indian passengers, 11,504 were pilgrims who left the Port of Bombay for ports out of India, and 148 were members of crews and passengers who arrived by vessels on which cases of infectious diseases had occurred during the voyage or while in the port. In addition to the above mentioned numbers, 3,412 baggage coolies and some stevedores' men were inspected in order to enable certain vessels to work cargo for a few hours after medical inspection and disinfection of their crews and passengers.

II—Out-going Vessels.

2. In accordance with Government Notification, General Department, No. 1713, dated the 15th March 1917, the medical examination of all vessels, crews and passengers, proceeding to ports out of India and the disinfection of the clothing and bedding of (*a*) all Asiatic and African members of crews, numbering 31,896, of (*b*) all passengers travelling third class who were not provided with cabin accommodation, of fourth class and deck passengers and of all Asiatic and African servants, numbering 17,580 and of (*c*) 11,504 pilgrims who sailed on such vessels, were carried-out before they left the port of Bombay.

3. Six hundred and seventy-eight outward bound vessels with 76,827 crew and 66,766 passengers, or a total of 143,593 persons exclusive of troops who were examined by the Military Embarkation Staff, were inspected as against 621 vessels with 71,300 crew and 59,710 passengers or a total of 131,010 persons during the preceding year.

4. Nine vessels had cases of small-pox, measles, chicken-pox or scarlatina among their crews and passengers within 12 days prior to their departure from this port. The Bills of Health granted to these vessels mentioned the diseases which had occurred on board

as well as the measures which had been taken before their departure for the prevention of the spread of infection on board or its introduction into other ports.

III—Infectious Diseases on Vessels Arriving, Departing or in the Harbour or Docks.

5. In accordance with the rules prescribed under Government Notification, No. 1713, dated the 15th March 1917, medical inspection and disinfection of vessels which were actually infected or suspected of being infected were carried out. All pilgrim ships and all vessels which arrived from East African Ports between the limits of Durban and Port Sudan were also inspected on arrival.

6. One hundred and sixty-one in-coming vessels with crews aggregating 18,420 persons and 28,322 passengers and pilgrims were inspected during the year. Of these 161 vessels, 24 (including Hired Transports) were found to have had cases of infectious disease on board at the time of arrival or during the voyage. In connection with these vessels there were 10 cases of measles, 12 of chicken-pox, 2 of influenza, and 2 of scarlatina. The cases which occurred on Hired Transports were dealt with by the Military Authorities on landing in Bombay, and those among the crews of Transports and all persons of other vessels by the Port Health Officer. The cases enumerated above as having occurred among the troops were removed to the Military Hospital on shore for treatment, those among the European crews and passengers were removed to St. George's Hospital; and those among the Asiatic and African members of crews and passengers to Jamsetjee Jeejeebhoy, Goculdas Tejpal, Arthur Road, or Maratha Hospitals.

7. Tabular statement No. 1 gives the number of cases of infectious diseases which occurred on vessels arriving at the port of Bombay or on those lying in the harbour or docks.

8. Tabular statement No. 2 gives separately the details of infectious diseases on vessels in the harbour or docks. The clothing and bedding of the crews of these vessels aggregating 148 persons were disinfected.

IV—Disinfection and Fumigation of Ships.

9. During the year under report 27 vessels were disinfected and fumigated.

10. Of the 27 vessels referred to in the foregoing paragraph, 18 vessels were fumigated by means of the Clayton process. Of this number, 14 were outward bound pilgrim vessels, proceeding to Jeddah, and 4 were fumigated at the request of the owners. In addition to these vessels, the British India Steam Navigation Company fumigated 26 steamers by their own apparatus and by the Port Clayton apparatus which was occasionally lent to them at their request for the purpose.

11. The Port Disinfection Station received clothing and bedding from various hospitals and Shipping Companies for disinfection.

7,436 bundles containing clothing and bedding of this kind were disinfected, as against 4,963 bundles during the preceding year.

12. There were no deaths from mephitic gas poisoning while cleansing bilges of ships during the year. There were 657 accidents on board vessels which were lying in the harbour or docks. Of these 49 proved fatal.

V—Red Sea Pilgrim Traffic.

(a)—Outward Pilgrim Traffic.

13. In accordance with the orders of the Government of India in force, the outward Pilgrim Traffic of the year under report began on 17th January 1929. Before the pilgrims embarked at Bombay the ships were thoroughly cleansed and freed from rats by means of the Clayton process.

The pilgrims were medically inspected, and their bedding and all clothing which were likely to have been exposed to infection were disinfected before they were allowed to embark.

14. During the year under report 11,504 pilgrims left for Jeddah. The names of ships, the number of pilgrims carried by them and the dates on which they left Bombay for Jeddah are given in a tabular statement as under :—

No.	Name of vessel	Number of pilgrims sailed	Date of departure, 1929
1	S. S. "Khosrou"	548	17th January.
2	S. S. "Rahmani"	1,437	14th February.
3	S. S "Jehangir"	215	26th ,,
4	S. S. "Arabestan"	692	23rd March.
5	S. S. "Sultania"	773	27th ,,
6	S. S. "Akbar"	1,507	28th ,,
7	S. S. "Rahmani"	1,776	4th April.
8	S. S. "Zayani"	952	6th ,,
9	S. S. "Alavi"	1,171	9th ,,
10	S. S. "Arabestan"	810	22nd ,,
11	S. S. "Sultania"	776	25th ,,
12	S. S. "Khosrou"	255	29th ,,
13	S. S. "Englestan"	411	30th ,,
14	S. S. "Alavi"	181	23rd December.
	Total ...	11,504	

15. Ten thousand six hundred and fifty-one pilgrims were vaccinated before starting by a special vaccinating staff placed at the disposal of the Police Commissioner by the Municipality No one was inoculated for cholera during the year.

(b)—Inward Pilgrim Traffic.

16. During the year under report 7,915 pilgrims arrived from Jeddah in 18 vessels as tabulated in statement No. 3 which is appended to this report.

VI—Sanitary State of the Harbour and Foreshore.

17. The Sanitary state of the harbour and the various bunders and docks was generally good.

VII—General.

18. Lieut-Colonel W. M. Houston, M.B., D.P.H., D.T.M., I.M.S., was in charge of the Port Health Department from 1st January to 16th March during the year under report. Lt. F. H. Otto, I.M.D., from 17th March to 4th June and Major P. H. S. Smith, I.M.S., from 5th June till the end of the year acted as Port Health Officer.

19. The members of the Medical, Clerical and Sanitary Police Staffs performed their duties satisfactorily.

A. C. L. BILDERBECK,
Major, I.M.S.,
Ag. Health Officer of the Port.

Bombay Port Health Office :
New Custom House,
Dated 4th March 1930.

TABLE No. 1.

Statement showing the summary of the shipping of Bombay Port and work done in connection therewith for the year ending 31st December 1929.

Vessels including Country Craft	No. of vessels inspected	No. of persons inspected	No. of Asiatic and African crew and 3rd Class or Deck passengers disinfected	No. of vessels		No. of persons vaccinated for small-pox and inoculated for cholera	
				Disinfected	Fumigated	Vaccinated	Inoculated
Entered	161	46,742	1,021	5	...	...	...
Left	678	143,593	60,980	...	14	139 10,651 (pilgrims)	...
In harbour during the year ...	16	148	148	4	4	...	...
Total ...	855	190,483	62,149	9	18	10,790	...
Total for 1928 ...	792	171,151	55,943	10	27	9,856	...

Vessels including Country craft	Diseases and cases of each									
	Plague	Cholera	Small-pox	Measles	Chicken-pox	Jigger	Influenza	Acute Pneumonia	Leprosy	Scarlatina
Entered	...	...	...	10	12	...	2	...	...	2
Left	...	...	...	...	...	...	...	...	...	...
In harbour during the year ...	...	4	8	5	2	...	9	...	...	4
Total ...	...	4	8	15	14	...	11	...	...	6
Total for 1928 ...	...	...	6	41	7	...	12	...	2	1

TABLE No. 2.

Statement showing the number of steamships, square-rigged vessels and Indian Craft which became infected while lying in the Port of Bombay during the year 1929.

Months	No. of persons who were infected with infectious diseases in Docks and Bunders			Total number of infected vessels.	Total number of infectious diseases in the Bombay Harbour.								No. of crows disinfected
	Plague	Cholera	Influenza		Plague	Cholera	Small-pox	Measles	Chicken-pox	Scarlatina	Mumps	Leprosy	
January ...	...	...	...	1	...	...	...	1	...	...	...	...	99
February ...	...	...	...	...	...	...	...	...	...	...	...	...	...
March ...	...	3	...	3	...	3	1	1	...	...	...	...	...
April ...	...	...	9	3	...	...	2	...	...	...	...	...	39
May ...	...	1	...	3	...	1	1	1	...	...	...	...	10
June ...	...	...	...	...	...	...	...	...	...	...	...	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	4	...	...	...	2	2	3	...	...	...
October ...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	...	...	...	2	...	...	4	...	...	1	...	...	...
December ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	4	9	16	...	4	8	5	2	4	...	...	148
Total for 1928 ...	...	...	...	7	..	...	4	...	3	...	...	...	533

TABLE No. 3.

Statement showing the number of pilgrims who arrived in Bombay from Jeddah by Vessels during the year 1929.

No.	Name of Ship	Date of arrival 1929	Number of crews inspected	Number of pilgrims inspected	Number of deaths during the voyage	Number of cases of infectious diseases on Board		Remarks
						On arrival	During voyage	
1	S S. "Rehmani" ...	5th June ...	120	1,765	11	...	...	...
2	S.S. "Khosrou" ...	8th ,, ...	108	1,501	8	...	...	...
3	S.S. "Shuja" ...	12th ,, ...	114	1,427	9	...	...	...
4	S.S. "Sarvistan" ...	12th ,, ...	115	383	7	...	One Small-pox.	Landed at Karachi.
5	S.S. "Zayani" ...	13th ,, ...	92	93	14	...	...	...
6	S.S. "Sultania" ...	16th ,, ...	113	218	19	...	...	...
7	S.S. "Englestan" ...	17th ,, ...	108	96	8	...	Two Small-pox.	Landed at Aden.
8	S.S. "Dara" ...	20th ,, ...	100	298	21	...	...	...
9	S.S. "Alavi" ...	15th July ...	109	208	6	...	...	...
10	S.S. "Akbar" ...	16th ,, ...	94	207	1	...	...	...
11	S.S. "Arabestan" ...	18th ,, ...	107	323	7	...	...	...
12	S.S. "Sultania" ...	27th ,, ...	102	338	12	...	...	...
13	S.S. "Jehangir" ...	31st ,, ...	109	167	1	...	...	...
14	S.S. "Alavi" ...	29th August ...	87	246	2	...	...	...
15	S.S. "Jehangir" ...	31st ,, ...	84	165	...	...	...	...
16	S.S. "Alavi" ...	11th October ...	85	267	...	...	...	...
17	S.S. "Jehangir" ...	5th November ...	84	111	...	...	...	...
18	S.S. "Alavi" ...	27th ,, ...	82	102	...	...	...	...
		Total ...	1,823	7,915	126	...	Three Small-pox.	Landed at Karachi and Aden.

APPENDIX II (*b*).

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF KARACHI FOR THE YEAR ENDING 31ST DECEMBER 1929.

I—General Remarks.

During the year under report, City of Karachi was threatened with a serious epidemic of Cholera in the months of August and September, on account of influx of large numbers of refugees from the Cholera stricken areas of Sind, where the floods had effected, havoc of a very severe magnitude. But due to the efforts of the Officials concerned, the cases of Cholera in the City of Karachi were restricted to refugees and their immediate contacts only, and even amongst them the cases were very, very few. These few cases however had a certain amount of effect on the shipping, as I was given to understand that ships going up to the Persian Gulf were subjected in foreign ports, to special Quarantine measures, on account of these few cases of Cholera at Karachi.

With the inauguration of the Imperial Airways, London-Karachi Air Service, from 7th April 1929, additional work of Medical Inspection of crews and passengers of Air Crafts proceeding from Drigh Road (the Air Port of Karachi) has also been devolved upon the health Officer of the Port, in accordance with orders issued by Government in G. D., G. R. No. 3073, dated 27th September 1927, so as to comply with the requirements of the International Quarantine Board, Alexandria, and also the International Sanitary Convention.

With the opening of the Air Service, a new anxiety has arisen, in connection with the possibility of introduction of diseases like Yellow Fever into India from Africa and other endemic zones, by Air Crafts through Karachi, the premier Air Port of India.

India is not wanting in those Mosquitoes which are popularly known as Yellow Fever Mosquitoes (Stegomyia Fasciate syn: Aedes Egypti) hence if Yellow Fever be once introduced into India, it will play a havoc in the non-immune population of this vast country, where its insect vector abounds in abundance. As at present, the Air Crafts coming to India do not touch the endemic West Coast of Africa and other endemic zones, the risk of introduction of Yellow Fever is remote, but feeling that the possibility still existed, I discussed the matter with the Members of the Board of Health, Karachi, at an emergent meeting of the Board called for the purpose on 15th July 1929 and at this meeting it was unanimously resolved by the members, that though the risk of introduction of Yellow Fever into India, by Air Crafts was remote at present, still the danger existed, and they felt that the matter should be brought to the notice of the Government of India in the Health Department. The matter has accordingly been brought to the notice of the Public Health Commissioner with the Government of India and is receiving the attention of Government of India.

In addition to the Medical Inspection of crews and passengers of the Imperial Airways' Liners, and granting of Bills of Health to the same, Bills of Health were also granted to Air Crafts of the

Royal Dutch Air Mail Far East Service, while they were making a series of fortnightly trial flights from Holland to Java.

II—Out-going Vessels.

Three hundred and forty-eight steamers outward bound for Ports beyond India were inspected and granted Bills of Health during the year under report.

Of this number 139 steamers were proceeding to Aden, the Red Sea Ports and Europe and 209 to other Ports out of India including the Persian Gulf.

In addition to the above, 11 Pilgrim Ships from Jeddah bound for Bombay, made a passing call at Karachi to land pilgrims booked for this Port. The Bills of Health of these ships were endorsed and pratiques were granted to them after medical inspection of their passengers and crews.

Three hundred and sixty-nine country crafts sailing for Ports beyond India, were also granted Bills of Health after Medical Inspection.

In accordance with the Port Health Regulations in force, the Asiatic and African crews, deck and third class passengers, of all steamers and country crafts proceeding to Ports out of India, were medically inspected and their clothing bedding and other articles disinfected at the Port Health Disinfection Station, Karachi, prior to their departure from the Port of Karachi.

III—Incoming Vessels.

During the year under report 54 steamers arrived in the Harbour in quarantine. These ships were medically inspected on their arrival and after necessary precautionary measures being carried out, pratiques were granted to them.

Of these 54 steamers, 27 arrived from African Ports, 11 Pilgrim Ships from Jeddah *viâ* Aden and the remaining 16 from various other Ports.

Eight country crafts arrived here in quarantine from East African Ports. They were also medically inspected on their arrival and pratiques were granted to them.

IV.—Synopsis of Medical Inspection and Disinfection performed during the year.

The following tabular statement shows the number of vessels crews and passengers inspected:—

	Vessels.			Crews and Passengers		
	Steamers.	Country crafts.	Total.	Of steamers.	Of country crafts.	Total.
Incoming ...	54	8	62	18,579	76	18,655
Outgoing ...	348	369	717	63,952	4,180	68,132
					Total ...	86,787

Of these 86,787 persons (crews and passengers) who were medically inspected on their arrival at, or departure from the Port of Karachi, 56,715 persons (crews and passengers) also had their clothing, bedding and other articles disinfected.

V—Grant of Bills of Health to Air Crafts at Drigh Road Aerodrome (Air Port of Karachi).

The first London-Karachi Service, British Air Mail Liner " City of Baghdad " homeward bound, left Drigh Road Aerodrome (Air Port of Karachi) on 7th April 1929; while the Royal Dutch Air Mail started their fortnightly trial flights from 13th October 1929.

During the year under report, Bills of Health were granted to 47 Air Crafts after medical inspection of their crews and passengers. Of these 41 belonged to the Imperial Airways, 5 to the Royal Dutch Air Mail Service and one was a privately owned Air Craft.

Total number of crew of Air Crafts inspected was 141 and passengers 54.

VI—Miscellaneous Disinfection.

On some occassions during the year under report, clothing, bedding, etc., sent by private individuals were duly disinfected by steam in the " Equifex Steam Disinfectors ".

VII—Plague.

No case of this disease occurred on in-coming or out-going vessels during the year under report.

VIII—Cholera.

No case of this disease occurred during the year under report, on either in-coming or out-going vessels.

IX—Leprosy.

No case of this disease occurred on in-coming or out-going vessels during the year under report.

X—Small-pox.

During the year under report 3 cases of Small-pox were removed from the below mentioned steamers to the Epidemic Diseases Hospital, Karachi, for treatment:—

(*a*) One Asiatic crew of the S.S. " Ridderkerk " suffering from Small-pox was landed and sent to the Epidemic Diseases Hospital, Karachi, on 15th March 1929. The kit of the Asiatic Crew was disinfected at the Port Health Disinfection Station and the whole crew, Europeans and Asiatics were vaccinated against Small-pox. The ship sailed for Europe on 17th March 1929. The Bill of Health granted to the vessel was endorsed accordingly. No further cases occurred on the ship after these precautionary measures being carried out.

(*b*) One Saloon Crew of the S.S. "Varela" on her arrival from Busrah on 28th February 1929 was found suffering from Modified Small-pox. The patient was sent to the Epidemic Diseases Hospital, Karachi, and all the kit of the Asiatic Crew was disinfected at the Disinfection Station and the infected parts of the steamer were washed out with disinfecting fluid. Vaccination was offered and those willing were duly vaccinated. The ship sailed for Bombay on the same day. The Port Health Officer of Bombay was informed accordingly by wire.

(*c*) S.S. "Varela" arrived here from Busrah on 11th April 1929 and a Fireman was found to be suffering from Modified Small-pox. The patient was immediately sent to the Epidemic Diseases Hospital for treatment and necessary disinfection was carried out on board. This patient was recently taken on the ship at Bombay during the previous voyage, in place of a Fireman who was discharged at Bombay. Necessary precautionary measures were carried out on board. The Port Health Officer, Bombay, was notified by wire.

(*d*) During the medical inspection and disinfection at the Port Health Disinfection Station of passengers for S.S. "Varsova" sailing for Busrah on 15th December 1929, two children amongst the deck passengers were detected to be in the "Scabbing Stage" of Small-pox. Both the children together with their parents were prevented from embarking on the vessel.

XI—Chicken-pox.

Seven cases of Chicken-pox occurred on the following steamers:—

(1) H.T. "Neuralia"—This ship arrived here on 12th March 1929 and had one active case and two convalascent cases of Chicken-pox on board. These were the children of families of European Troops. The patients and contacts were taken charge of by the Military Medical Authorities. Necessary disinfection on board was carried out.

(2) S.S. "City of Paris" arrived here from Bombay on 4th April 1929, with three cases of Chicken-pox on board amongst the Asiatic Engine Crew. She had previous to her arrival at Bombay on 21st March 1929 from Liverpool, nine cases amongst the Engine Crew. The kit of all the Asiatic Crew was disinfected here and the cases were removed to the Epidemic Diseases Hospital for treatment. No further cases occurred on board.

(3) S.S. "Vasna" arrived here from Busrah on the 9th May 1929 and reported a case of Chicken-pox amongst the deck passengers. The rash had developed on the 8th May 1929. The patient was a baby nine months old. The patient and contacts were disembarked here and sent to the Epidemic Diseases Hospital, Karachi. Necessary disinfection was carried out on board and the ship sailed for Bombay on the same day. The Port Health Officer, Bombay, was notified by wire.

XII—Acute Pneumonia.

No case of Acute Pneumonia was detected during the year under report on any of the in-coming or out-going vessels.

XIII—Measles.

The undernoted five cases of Measles including two cases of German Measles occurred on board the following ships :—

(1) H.T. "Neuralia" which arrived here on 12th March 1929 had one child suffering from Measles, and was sent to the Military Hospital by the Military Authorities on landing here.

(2) S.S. "Varela" arrived here on 30th March 1929 from Bombay with one case of German Measles on board. The patient was a child of a second class passenger. The patient and contacts landed here. All the necessary precautions were taken and the ship sailed for Persian Gulf on 31st March 1929. The Bill of Health was endorsed accordingly.

(3) S.S. "Nirpura". The third Officer of this vessel developed German Measles while the steamer was in the port on 26th August 1929. The patient was immediately sent to the Epidemic Diseases Hospital, Karachi. Necessary disinfection was carried out. On further inquiry into the history of the case, it was elicited that on 16th August when the ship was at Colombo, the second Officer was landed there, suffering from high temperature, Catarrahal symptoms and with rash on his body.

(4) S.S. "Chakla". A first class passenger from Bombay arrived here by this steamer on 30th September 1929 and went to Civil Hospital, Karachi, in the afternoon of the same day, for consultation as he was feeling out of sorts. He was admitted into the Hospital for observation, but in the evening of the same day he developed rash on his body whereupon he was at once transferred to the Epidemic Diseases Hospital and the Port Health Officer was informed by the Civil Hospital authorities. On the receipt of this information, the cabin occupied by the patient and the articles of bedding, etc., used by him on the vessel during the voyage were duly disinfected.

(5) H.T. "Somersetshire" arrived here from the United Kingdom with British Troops on 12th December 1929. Eight cases of Measles occurred on board the ship, of whom three were men and five children. All of them were removed ashore into isolation by the Military Medical Authorities. All the necessary precautions were carried out.

XIV—Mumps.

No case of Mumps was reported or detected on the in-coming or out-going vessels, during the year under report.

XV.—Yellow Fever, Jigger, Sleeping Sickness, Scarlet Fever, Cerebro-Spinal-Meningitis and Influenza.

No case of these diseases occurred during the year under report.

XVI—Non-Notifiable Diseases.

No cases of these were sent to the Civil Hospital, Karachi, for treatment by this department.

XVII—Deaths due to Non-Notifiable Diseases.

Six deaths from various Non-Notifiable diseases were reported having occurred on board the steamers in Karachi Harbour or during the voyage to Karachi during the year under report.

XVIII—Red Sea Pilgrim Traffic.

Outward Pilgrim Season during the year under report commenced on 21st January 1929, and 11 steamers carrying 7,518 Pilgrims, sailed from here.

Immediately before embarkation, the pilgrims were medically inspected and their clothing, bedding, etc., disinfected at the Port Health Disinfection Station, Keamari.

The names of steamers, the number of pilgrims carried by them and the dates on which they sailed from Karachi to Jeddah are given below in tabular form :—

Name of ship.	Date of sailing.	Number of pilgrims.
P.s. "Khosrou" ...	... 21st January 1929 ...	86
„ "Rahmani" ...	... 19th February 1929 ...	361
„ "Jehangir" ...	... 2nd March 1929 ...	954
„ "Arabestan" ..	... 26th March 1929 ...	512
„ "Sultania" ...	... 31st March 1929 ...	757
„ "Jehangir" ...	... 5th April 1929 ...	1,170
„ "Shuja" ...	... 19th April 1929 ...	1,442
„ "Arabestan" ...	... 25th April 1929 ...	412
„ "Sultania" ...	... 29th April 1929 ...	771
„ "Khosrou" ...	... 3rd May 1929 ...	413
„ "Englistan" ...	... 3rd May 1929 ...	640
	Total ...	7,518

Out of the above named eleven steamers, one steamer "Jehangir" which sailed on 5th April 1929 was fumigated and freed from rats by means of the Clayton Apparatus, as the vessel commenced its voyage from this port.

The Pilgrim ship "Shuja" also commenced its voyage from this port, but she was fumigated at Bombay by "The Clayton Apparatus" and freed from rats, etc., as she had to load cargo at that port, prior to her coming here.

At the time of the final medical inspection of the Pilgrim Ship "Khosrou" which sailed from here on 21st January 1929, one Bombay pilgrim was found on board to be suffering from Small-pox, he was accordingly landed on shore and sent to the Epidemic Diseases Hospital, Karachi, for treatment.

General Health of the pilgrims on the outward voyage was very good and from the report of the Director, Kamaran Lazaretto, it appears that only 15 deaths occurred amongst 19,829 Indian Pilgrims who sailed from India (Bombay and Karachi) thus giving

a death rate of ·07 for every hundred pilgrims sailing from India. This death rate compares very favourably with the mortality amongst pilgrims sailing from the below noted areas :—

	Total number of pilgrims.	Deaths per 100 pilgrims.
Dutch East Indies	27,846	·19
Straits Settlements	5,879	·27

B.—Inward Pilgrim Traffic.

The following table shows the number of pilgrims who returned to Karachi from Jeddah, the names of ships by which they travelled and other particulars :—

No.	Name of steamer.	Date of arrival.	Number of crew.	Number of pilgrims for Karachi.	Number of deaths during voyage or in harbour.	Number of cases of infectious disease during the voyage or on arrival.
1	s.s. "Alavi" ...	17th January 1929.	111	20	*Nil.*	*Nil.*
2	„ "Akbar" ...	7th June 1929 ...	112	1,510	11	*Nil.*
3	„ "Zayani" ...	9th June 1929 ...	93	865	12	*Nil.*
4	„ "Sarvistan" ...	10th June 1929 ...	115	1,184	7	One case of Small-pox.
5	„ "Sultania" ...	13th June 1929 ...	114	1,122	16	*Nil.*
6	„ "Englistan" ...	14th June 1929 ...	108	259	8	Two Small-pox cases landed at Aden
7	„ "Dara" ...	17th June 1929 ...	109	1,129	21	*Nil.*
8	„ "Alavi" ...	11th July 1929 ...	109	969	5	*Nil.*
9	„ "Arabestan" ...	15th July 1929 ...	107	740	6	*Nil.*
10	„ "Sultania" ...	24th July 1929 ...	112	913	12	*Nil.*
11	„ "Jehangir" ...	28th July 1929 ...	110	199	1	*Nil.*
		Total ...	1,191	8,910	99	Three (Two Small-pox cases landed at Aden and one at Karachi).

In all 8910 pilgrims returned to Karachi during the Inward Pilgrim Season of 1929.

Ninty-nine deaths as shown in tabular form B, occurred on the returning Pilgrim Ships. Thus giving a death rate of 1·1 for every 100 returning pilgrims. Deaths were mostly due to General Debility, Diarrhoea, Bronchitis, Old Age, Pneumonia, Dysentery, Heart Failure, Malaria, Heat Stroke and Emaciation. Sixty-seven pilgrims were in ships' Hospital on arrival at Karachi, i.e., 4 on

"Akbar", 5 on "Zayani", 10 on "Sarvistan", 3 on "Sultania", 2 on "Englistan", 10 on "Dara", 9 on "Alavi", 12 on "Arabestan", 9 on "Sultania" and 3 on "Jehangir" suffering from General Debility, Diarrhœa, Dysentery and Emaciation. Out of these 67 pilgrims three were sent to the Civil Hospital, Karachi, for treatment, and two to the Lady Dufferin Hospital, Karachi, for treatment, while the rest declined to go to Hospital and proceeded to their homes with their friends and relations, they were supplied with necessary medicines.

It will also be seen, from the increased death rate amongst the in-coming Indian Pilgrims, that the general physical condition of the pilgrims, on the return voyage had suffered a lot due to hardships at the Haj.

XIX—Clayton Apparatus.

Four steamers were fumigated during the year under report. Two of these were fumigated according to the Standard laid down by the Netherlands Government and necessary certificates were issued to them.

XX—Sanitary State of the Harbour.

The sanitary state of the Harbour was satisfactory.

XXI—Plague, Cholera, Small-pox, Measles, Chicken-pox, Influenza and Acute Pneumonia in the City of Karachi.

During the year under report, there occurred no deaths from Pague, 21 (including 12 imported) from Cholera, 309 (including 15 imported) from Small-pox, nil from Chicken-pox, 912 from Measles, 1 from Influenza and 1,656 from Acute Pneumonia.

XXII—Staff.

I had proceeded on one month's leave on average pay from the afternoon of 14th November 1929 to the afternoon of 14th December 1929, and Military Assistant Surgeon J. E. Howard, L.R.C.P., M.R.C.S., I.M.D., Assistant Port Health Officer, acted as Port Health Officer during my absence on leave, in addition to his own duties.

Rao Sahib Baharsing Toursing Advani, S.M.S., having attained the age of 55 years, retired from service, from the afternoon of 16h May 1929 and Mr. Mohamed Yousif Shaikh Ali Shaikh, S.M.S., was appointed in his place.

Mr. J. G. Cordeiro, Second Clerk, proceeded on four months leave on average pay from the forenoon of 22nd April 1929, which was extended by 10 months leave on half average pay, and Mr. M. Braganza was entertained in the department as a temporary clerk, to fill in the leave vacancy.

I am pleased to observe that the entire staff worked to my complete satisfaction.

B. F. KHAMBATTA,
M.B., B.S., D.P.H.,
Health Officer of the Port, Karachi.

APPENDIX I (*c*)

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF ADEN FOR THE YEAR 1929.

I—General Remarks.

One thousand five hundred and eighty-three vessels and rigged vessels were granted Bills of Health during the year against one thousand six hundred and seventy-five for the year 1928.

Of the above number 1073 were sailing under the British flag and 510 under Foreign Flags.

The accompanying table "A" gives a list of vessels on board of which infectious diseases existed on arrival. In the case of these vessels, all sanitary precautions were taken to prevent the spread of the disease.

The following cases of infectious diseases were landed from shipping :—

Small-pox	...	...	...	...	2
Chicken-pox	...	...	...	...	4

II—Pilgrim Traffic.

Thirteen ships carrying pilgrims passed through the Port of Aden during the year. All were medically examined but they were not granted pratique.

Year	No. of Ships.	No. of Pilgrims.	Deaths
1929	13	3,959	1

III—Table "A"

The following is the list of vessels on board of which cases of infectious diseases existed on arrivals at this Port during the year :—

Date	Name of Ship	Nationality	From	To	Number of cases	Remarks
4th January 1929	"Ranchi" ...	British.	London ...	Bombay ...	1 Mls ...	Isolated OB.
12th January 1929	"Macedonia" ...	"	"	"	1 Mls ...	"
23rd February 1929.	"Llanstephan Castle."	"	P. Sudan ...	E. Africa ...	1 Mls ...	"
7th March 1929 ...	"Nankin" ...	"	London ...	Calcutta ...	1 Inf. ...	"
24th March 1929 ...	"City of Salford".	"	Rangoon ...	London ...	1 C. P. .	"
Do. ...	"Delta" ...	"	London ...	Bombay ...	1 C. P. .	Landed.
29th March 1929 ...	"Clan Morrison"	"	Tillbury ...	Newyork ...	1 C. P. .	Do.

Date	Name of Ship	Nationality	From	To	Number of cases	Remarks
1st April 1929 ...	"Mashobra" ...	British .	Colombo ...	London ...	1 C. P. .	Isolated OB.
16th April 1929 ...	"Ranpura" ...	,,	Bombay ...	Do. ...	1 Mls ...	Do.
Do. ...	"Malwa" ...	,,	China ...	Do. ...	1 C. P. .	Do.
25th April 1929 ...	"Llandovery Castle".	,,	E. Africa ...	Do. ...	1 Inf. ...	Do.
4th May 1929 ...	"Rajputana" ...	,,	London ...	Bombay ...	1 Mls ...	Do.
1st June 1929 ...	'B. D. St. Pierre"	French .	Mombassa ,	France ...	1 Pneu .	Do.
8th do. ...	"Englistan" ...	British .	Jeddah ...	Bombay ...	2 S. P. ...	Landed.
20th November 1929.	"Domala" ...	,,	Suez ...	Bombay ...	1 C.P. .	Isolated OB.

N.B.—S. P. stands for Small-pox; C. P. stands for Chickenpox; Mls. stands for Measles; Inf. stands for Influenza; and Pneu. stands for Pneumonia.

IV.

The following are the names and other information regarding the Pilgrimships which passed through Aden during the Year under report :—

Date	Name of ship	Nationality	From	To	Number of		
					Pilgrims	Infectious cases	Death
2nd April 1929 ...	"Ayamonte" ...	British .	Aden ...	Jeddah ...	84	...	...
7th April 1929 ...	"El-Amin" ...	,,	Mokalla ...	,,	270	...	...
23rd April 1929 ...	"Ayamonte" ...	,,	Aden ...	,,	127	...	...
24th April 1929	"El-amin" ...	,,	Djibouti ...	,,	226	...	...
4th May 1929 ...	"El-amin" ...	,,	Aden ...	,,	43	...	...
8th May 1929 ...	"Ayamonte" ...	,,	,,	,,	25	...	...
9th May 1929 ...	'Englistan" ...	,,	Karachi ...	,,	1,051	...	...
8th June 1929 ...	"Englistan" ...	,,	Jeddah ...	Bombay ...	368	2	1
16th June 1929 ...	"Rietfontein" ...	Dutch ...	,,	S. Africa .	93	...	...
8th July 1929 ...	"Akbar" ...	British .	,,	Bombay ...	390	...	...
8th July 1929 ...	"Arabistan" ...	,,	,,	Bombay ...	1,068	...	...
28th October 1929.	"Jehangir" ...	,,	,,	,,	109	...	...
19th November 1929.	"Alavi" ...	,,	,,	,,	102	...	...

V.—Establishment.

Lieut.-Colonel E. S. Phipson, D.S.O., M.D., D.P.H., M.R.C.P., D.T.M., & H., I.M.S., Health Officer of the Port of Aden from 1st to 18th April 1929, both days inclusive. Major C. L. Bilderbeck, M.A., M.B., D.P.H., I.M.S., Officiating Health Officer of the Port, from 19th April to 31st December 1929, both days inclusive.

VI.—Office Establishment.

Mr. E. Naser, Head Clerk to the Health Officer of the Port from 1st January to 31st December 1929 inclusive.

Peon Omer Abubaker from 1st January to 31st December 1929.

Peon Abdulla Hussain from 1st January to 30th November 1929, and Peon Ahmed Abdulla from 1st to 31st December 1929 inclusive.

VII.—Launch Establishment.

Driver Hasson Noman from 1st January to 31st December 1929.

Stoker Abdo Noman from 1st January to 31st December 1929.

Succani Mohamed Magan from 1st January to 31st October 1929.

Mohamed Abdulla (appointed from 1st) taken on duty from 8th November to 31st December 1929.

Lascar Mohamed Elmi from 1st January to 31st December 1929.

VIII.—Disinfecting Stove.

A fireman was retained for the care of Disinfecting stove on Flint Island during the year in accordance with Government Order, General Department, No. 4607, dated 18th April 1920.

IX.—The Small-pox epidemic of 1929.

The settlement and Port of Aden were visited by an epidemic of small-pox during the year. Sporadic cases occurred during the early months of the year, and by the month of April there were indications that the disease was beginning to assume epidemic proportions. Vaccination was carried out among the contacts of each case as it occurred, and among persons living in the neighbourhood, but the concealment of cases and the inaccurate methods of death registration, led to numerous unrecognised foci of the disease in the neighbourhood of which vaccination was not carried out. In June it became obvious that these concealed cases were affecting the general mortality and were sufficiently numerous to constitute a menace to the settlement and shipping, and it was decided to declare the port infected with epidemic small-pox. This was done on July 1st and intensive measures to combat the epidemic were put into operation. These consisted essentially of a house to house vaccination campaign designed to include every man, woman and child in the settlement, coupled with the application of section 2 of the Epidemic Diseases Act, giving additional powers including the right of search and removal to hospital of cases and contacts where necessary, and the right to insist on the re-vaccination of all new arrivals in Aden. These additional powers were put into operation on August 14th and by September 5th the vaccination or re-vaccination of practically the entire population had been completed, 78,397 vaccinations having been performed, out of an estimated population of about 55,000. As the concealment of cases ceased and as the vaccinal state of the population improved, the epidemic made less headway and by the beginning of September the epidemic had subsided.

The Port of Aden and Settlement declared free and all restrictions removed as from September 5th.

Port Restrictions :—During the period the Port was in quarantine, the restrictions in force included the following :—

(1) Mass vaccination of the population.

(2) Employment of none but Vaccinated coolies for working coal and cargo.

(3) Disinfection of all coolies before being released for work.

(4) Restriction of all contact between ships and the shore by limiting traffic to personnel essential to the working of the ship.

(5) Bumboat traffic reduced to the lowest limit compatible with the ship's necessities.

(6) Inspection of all passengers embarking at Aden, and disinfection of their clothing and effects where necessary.

Ships working in the harbour, if certain rigid precautions were carried out, were given a certificate of having worked in "strict quarantine", and the majority of the ships-masters were anxious to comply with all such restrictions in order to obtain the "strict quarantine" certificate.

Summary of the Epidemic :—

Number of cases	314
Number of deaths	117
Percentage Mortality	34·07 per cent.
Number of vaccinations carried out ...	78,377
Population (Census 1921)	44,000
Estimated ...	55,000

E. S. PHIPSON,
M.D. (Lond.), M.R.C.P., D.P.H.,
Lieut.-Colonel, I.M.S.,
Health Officer of the Port of Aden.

APPENDIX II

The following table shows year of completion of drainage or water-works and a comparison of mean death-rate in the towns concerned for periods preceding and subsequent to installation.

In column 7 is given for comparison the death-rate of the adjoining rural circle for the year under report :—

District.	Town.	Date of completion of works of		Mean death-rate (a)		Death-rate in adjoining rural circle (a).	Mean death-rate from cholera *plus* dysentery and diarrhœa.		Remarks.
		Drainage.	Water supply.	For years preceding the installation.	For the years (succeeding installation) ending 1929.		For years preceding works.	For the years (following the works) ending 1929.	
1	2	3	4	5	6	7	8	9	10
Sholapur ...	Sholapur ...	...	1917	61·01	34·98	30·66	14·05	1·86	
Do. ...	Pandharpur.	...	1911	49·98	53·45	32·23	19·60	6·28	
Nasik ...	Nasik ...	...	1913	52·73	34·55	32·26	11·33	1·94	
Bijapur ...	Bijapur ...	...	1913	30·08	23·10	34·16	1·77	1·74	
Poona ...	Lonavla ...	...	1915	13·68	26·25	18·70	1·12	1·36	
Do. ...	Poona City*.	1916	....	36·47	39·59	18·97	10·15	2·54	* Chlorination of water-supply began in 1916.
Satara ...	Karad ...	...	1916	18·58	17·56	27·67	7·10	1·26	
Sholapur ...	Barsi ...	...	1917	44·41	37·31	35·37	5·83	2·79	
Nasik ...	Trimbak ...	...	1921	43·88	20·15	32·36	2·35	0·75	
Poona ...	Poona Cantonment.†	...	1916	23·49	11·79	18·97	2·07	0·87	† Change in type of installation.
Sukkur ...	Sukkur ...	...	1924	21·48	22·32	58·28	·48	0·70	

(a) Exclusive of Plague and Influenza.

APPENDIX III

APPENDIX

ANNUAL FORM No. I.—*Showing the* BIRTHS *registered in the*

1	2	3			4		
Number.	Districts.	POPULATION ACCORDING TO CENSUS OF 1921.			NUMBER OF BIRTHS REGISTERED.		
		Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.						
1	East Khándesh	545,376	529,746	1,075,122	27,243	25,295	52,538
2	West Khándesh	309,511	303,201	612,712	16,733	15,939	32,672
3	Násik	418,510	406,706	825,216	20,982	19,697	40,679
4	Thána	388,310	368,589	756,899	13,359	12,400	25,759
5	Bombay Suburban ...	87,567	63,874	151,441	1,679	1,505	3,184
6	Kolába	279,350	283,122	562,472	12,134	11,874	24,008
7	Bombay City	751,948	396,867	1,148,815	12,198	11,709	23,907
	Central Registration District.						
8	Ahmednagar	362,947	361,031	723,978	20,644	19,705	40,349
9	Poona	500,601	487,080	987,681	19,815	18,270	38,085
10	Sholápur	383,167	360,002	743,169	17,448	16,549	33,997
11	Sátára	510,445	513,711	1,024,156	22,773	21,542	44,315
12	Ratnágiri	525,085	628,895	1,153,980	23,023	21,334	44,357
	Southern Registration District.						
13	Belgaum	484,615	465,047	949,662	20,921	20,196	41,117
14	Dhárwár	528,348	507,861	1,036,209	20,737	19,921	40,658
15	Bijápur	405,148	391,208	796,356	16,928	16,474	33,402
16	Kánara	203,950	197,526	401,476	7,505	7,203	14,708
	Gujarát Registration District.						
17	Surat	337,276	336,845	674,121	13,795	13,262	27,057
18	Broach	158,569	149,143	307,711	7,236	6,740	13,976
19	Kaira	379,702	331,203	710,905	14,332	12,922	27,254
20	Panch Mahals	193,385	181,446	374,831	7,748	7,405	15,153
21	Ahmodabad	473,693	414,231	887,924	18,754	17,453	36,207
	Sind Registration District.						
22	Karáchi	302,563	228,094	530,657	8,713	7,553	16,269
23	Hyderabad	316,834	250,415	567,249	5,970	5,039	11,009
24	Thar and Párkar	221,074	175,233	396,307	6,085	4,856	10,941
25	Nawabshah	233,826	184,826	418,652	6,353	4,656	11,009
26	Lárkána	331,204	266,733	597,937	7,289	5,445	12,734
27	Sukkur	281,493	227,869	509,362	7,210	5,652	12,862
28	Upper Sind Frontier ...	134,321	106,293	240,614	3,124	2,193	5,317
	Total for the Presidency ...	10,048,817	9,116,797	19,165,614	380,731	352,789	733,520

III

DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1929.*

5			6	7	8	9		
RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of males born to every 100 females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.	MEAN RATIO OF BIRTHS PER 1,000 DURING PREVIOUS FIVE YEARS.		
Male.	Female.	Total.				Male.	Female.	Total.
25·33	23·54	48·86	115·60	12·93	.....	24·91	23·39	48·30
27·31	26·01	53·32	104·98	17·14	.....	25·69	24·53	50·22
25·43	23·87	49·29	106·51	13·28	.....	24·03	22·49	46·52
17·65	16·38	34·03	107·73	8·95	.....	17·50	16·27	33·77
11,09	9·93	21·02	111·76	1·75	.....	9·98	9·12	19·10
21·57	21·11	42·68	102·19	15·69	.....	20·63	19·51	40·14
10·62	10·19	20·81	104·18	.....	2·09	9·58	9·06	18·64
28·51	27·22	55·73	104·77	20·68	.....	25·44	23·19	48·63
20·06	18·51	38·57	108·46	8·88	.....	18·37	16·89	35·26
23·48	22·27	45·75	105·43	6·83	.....	22·54	21·26	43·80
22·24	21·03	43·27	105·71	8·86	.....	21·25	20·13	41·38
19·95	18·48	38·43	107·92	14·29	.....	19·10	17·99	37·09
22·03	21·27	43·30	103·59	8·60	.....	20·89	19·99	40·87
20·01	19·22	39·24	104·10	5·04	.....	18·97	18·25	37·23
21·26	20·69	41·94	102·76	8·95	.....	20·36	19·62	39·97
18·69	17·94	36·63	104·19	6·83	.....	17·76	16·70	34·47
20·47	19·67	40·14	104·02	10·76	.....	21·21	20·05	41·26
23·51	21·90	45·41	107·36	12·88	.....	24·21	23·04	47·25
20·16	18·18	38·34	110·91	7·13	.....	20·03	17·95	37·98
20·68	19·75	40·43	104·63	16·57	.....	21·47	20·14	41·61
21·12	19·66	40·78	107·45	5·89	.....	20·05	18·44	38·50
16·42	14·23	30·65	115·35	3·25	.....	14·56	12·66	27·22
10·52	8·86	19.38	111·47	3·73	.....	9·54	7·47	17·01
15·35	13·25	27·60	125·31	12·42	.....	12·58	9·99	22·57
15·17	11·12	26·29	136·44	5·06	.....	13·75	10·15	23·90
12·19	9·11	21·30	133·86	.....	14·35	12·11	9·24	21·35
14·15	11·09	25·24	127·56	.....	11·54	14·78	11·22	26·04
12·98	9·11	22·09	142·45	.....	6·21	12·97	9·78	22·75
19·86	18·41	38·27	107·92	7·74	.....	18·95	17·51	36·46

ANNUAL FORM NO. II.—*Showing the* BIRTHS *and* DEATHS *during the*

1	2	3	4	5	
Number.	Districts.	Area in square miles.	Average population per square mile.	POPULATION (CENSUS, Male.	Female.
	Western Registration District.				
1	East Khandesh	4,551	236	545,376	529,746
2	West Khandesh	5,439	113	309,511	303,201
3	Nasik	5,877	140	418,510	406,706
4	Thana	3,434	220	388,310	368,589
5	Bombay Suburban	142	1,066	87,567	63,874
6	Kolaba	2,169	259	279,360	283,122
7	Bombay City	24	47,867	751,948	396,567
	Central Registration District.				
8	Ahmednagar	6,610	109	362,947	361,031
9	Poona	5,357	184	500,601	487,080
10	Sholapur	4,556	163	383,167	360,002
11	Satara	4,910	209	510,445	513,711
12	Ratnagiri	3,989	289	525,085	628,895
	Southern Registration District.				
13	Belgaum	4,611	206	484,615	465,047
14	Dharwar	4,606	225	528,348	507,861
15	Bijapur	5,707	139	405,148	391,208
16	Kanara	3,946	102	203,950	197,526
	Gujarat Registration District.				
17	Surat	1,651	408	337,276	336,845
18	Broach	1,468	210	158,568	149,143
19	Kaira	1,596	445	379,702	331,203
20	Panch Mahals	1,606	233	193,385	181,446
21	Ahmedabad...	3,824	232	473,693	414,231
	Sind Registration District.				
22	Karachi	11,231	47	302,563	228,094
23	Hyderabad	4,417	128	316,824	250,415
24	Thar and Parkar	13,636	29	221,074	175,233
25	Nawabshah	3,889	107	233,826	184,826
26	Larkana	5,057	118	331,204	266,733
27	Sukkur	5,612	91	281,493	227,869
28	Upper Sind Frontier	2,664	90	134,321	106,233
	Total for the Presidency ...	132,578	126	10,048,817	9,116,797

registered in the DISTRICTS *of the* BOMBAY PRESIDENCY *year 1929.*

6			7			8
1921).	BIRTHS.		NUMBER OF DEATHS REGISTERED.			Number of Deaths of males to every 100 deaths of females.
Total.	Total Number.	Birth-rate per 1,000 of population.	Male.	Female.	Total.	
1,075,122	52,638	48·86	19,550	19,081	38,631	102·44
612,712	32,672	53·32	11,182	10,988	22,170	101·77
825,216	40,679	49·29	15,141	14,577	29,718	103·87
755,899	25,759	34·03	9,881	9,100	18,981	108·58
151,441	3,184	21·02	1,482	1,437	2,919	103·13
562,472	24,008	42·68	7,715	7,466	15,181	103·33
1,148,815	23,907	20·81	14,408	11,898	26,306	121·10
723,978	40,349	55·73	13,135	12,238	25,373	107·33
957,681	38,085	38·57	14,962	14,361	29,323	104·19
743,169	33,997	45·75	14,491	14,430	28,921	100 42
1,024,156	44,315	43·27	17,418	17,824	35,242	99·35
1,163,980	44,357	38·43	13,609	14,250	27,859	95·52
949,662	41,117	43·30	16,605	16,349	32,954	101·57
1,036,209	40,658	39·24	17,342	18,097	35,439	95·83
796,356	33,403	41·94	13,096	13,176	26,272	99·39
401,476	14,708	36·63	6,031	5,933	11,964	101·65
674,121	27,057	40·14	10,099	9,704	19,803	104·07
307,711	13,976	45·41	5,046	4,966	10,012	101·61
710,905	27,254	38·34	11,560	10,629	22,189	108·75
374,831	15,153	40·43	4,724	4,218	8,942	112·00
887,924	36,207	40·78	16,194	14,787	30,981	109·52
530,667	16,266	30·65	8,046	6,519	14,565	123·42
567,249	11,009	19·38	5,310	4,216	9,526	125·95
396,307	10,941	27·60	3,408	2,609	6,017	130·62
418,652	11,009	26·29	4,780	4,110	8,890	116·30
597,937	12,734	21·30	11,425	9,885	21,313	115·63
509,362	12,862	25·24	9,581	9,162	18,743	104·57
240,614	5,317	22·09	3,554	3,258	6,812	109·03
19,165,614	733,520	38·27	299,178	285,268	5,85,046	105·01

ANNUAL FORM

1	2	DEATHS PER 1,000 OF				
Number.	Districts.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.
	Western Registration District.					
1	East Khandesh	1·75	1·88	...	17·56	1·50
2	West Khandesh	·47	2·24	·00	16·14	·94
3	Nasik	·42	·92	1·73	14·65	1·50
4	Thana	·01	·68	·18	9·91	1·04
5	Bombay Suburban	·02	·48	·00	8·48	2·13
6	Kolaba	.....	·70	·05	9·33	1·94
7	Bombay City	·01	·98	·02	1·99	1·05
	Central Registration District.					
8	Ahmednagar	·04	·39	·00	8·69	1·85
9	Poona	·00	·62	·15	11·88	1·62
10	Sholapur	·01	·17	2·20	15·40	2·24
11	Satara	·01	·15	4·76	12·88	2·05
12	Ratnagiri	.....	·37	·07	7·83	1·01
	Southern Registration District.					
13	Belgaum	·01	·23	3·77	9·67	3·50
14	Dharwar	·00	·44	5·35	10·66	·92
15	Bijapur	·00	·20	·38	14·48	2·12
16	Kanara	·03	·05	·33	11·20	1·85
	Gujarat Registration District.					
17	Surat	·00	·42	·14	8·91	1·34
18	Broach	.....	·05	...	14·99	·54
19	Kaira	.....	·31	...	11·46	1·01
20	Panch Mahals	·04	·18	...	14 31	·39
21	Ahmedabad	·01	·66	...	18·03	·85
	Sind Registration District.					
22	Karachi	2·55	·73	...	10·49	1·04
23	Hyderabad	·44	·05	...	10·32	·25
24	Thar and Parkar	·01	·04	...	11·17	·05
25	Nawabshah	·58	·19	...	18·47	·05
26	Larkana	6·20	·21	...	26·80	·14
27	Sukkur	1·31	·21	...	30·54	·32
28	Upper Sind Frontier	·77	·03	...	26·69	·16
	Total for the Presidency ...	·47	·56	·94	12·86	1·31

No. II—*contd.*

9						10		
Population from						Mean ratio of deaths per 1,000 during previous five years.		
Respiratory Diseases.	Injuries.	All other causes.	All Causes. Male.	Female.	Total.	Male.	Female.	Total.
4·53	·22	8·46	35·84	36·02	35·93	32·91	32·97	32·94
4·44	·33	11·62	36·12	36·24	36·18	28·71	28·32	28·54
6·32	·33	9·67	36·18	35·84	36·01	30·97	29·84	30·41
5·81	·59	6·86	25·45	24·69	25·08	22·73	22·24	22·49
5·67	·58	6·91	16·93	22·50	19·27	16·64	19·29	17·75
6·23	·44	8·30	27·62	26·37	26·99	26·96	25·35	26·15
9·55	·71	8·59	19·16	29·98	22·90	32·89	35·41	27·20
7·15	·42	16·51	36·19	33·90	35·05	31·45	28·86	30·21
6·12	·40	8·90	29·89	29·48	29·69	28·91	27·19	28·08
4·47	·51	13·92	37·82	40·08	38·92	31·90	31·85	31·87
9·68	·50	11·18	34·12	34·70	34·41	30·44	29·65	30·11
3·61	·46	10 79	25·92	22·66	24·14	25·32	21·74	23·41
4·47	·54	12·51	34·27	35·16	34·70	27·34	32·04	27·61
3·61	·44	12·74	32·82	35·63	34·20	30·51	30·94	30·72
3·97	·48	11·37	32·32	33·68	32·99	27·87	27·65	27·76
2·50	·48	13·36	29·57	30·04	29·80	30·63	30·51	30·57
10·97	·31	7·29	29·94	28·81	29·38	28·75	28·08	28·41
9·14	·41	7·40	31·82	33·30	32·53	33·24	34·01	32·90
10·67	·58	7·18	30·45	32·09	31·21	28·01	29·84	28·86
3·62	·40	4·92	24·43	23·25	23·86	22·56	23·03	22·78
7·89	·48	6·97	34·19	35·70	34·89	29·91	31·61	30·73
6·82	·29	5·52	26·59	28·58	27·44	18·88	21·19	19·57
2·93	·28	2·52	16·76	16·83	16·79	16·15	15·91	16·04
2·22	·34	1·35	15·41	14·88	15·18	19·87	19·92	19·81
·84	·29	·81	20·44	23·23	21·23	16·77	16·74	16·76
·56	·29	1·46	34·50	37·06	35·66	16·14	14·08	16·28
·93	·27	3·21	34·04	40·27	36·79	17·79	18·47	18·11
·18	·18	·35	26·46	30·65	28·31	12·61	13·68	13·08
5·21	·43	8·75	29·83	31·29	30·53	26·26	26·91	26·57

ANNUAL FORM NO. III.—DEATHS *registered in the* DISTRICTS

1	2	3				
Number.	Districts.	January.	February.	March.	April.	May.
	Western Registration District.					
1	East Khándesh	2,372	1,913	2,882	4,457	4,089
2	West Khándesh	1,846	1,380	1,882	2,367	2,171
3	Násik	2,928	2,259	2,239	3,008	2,723
4	Thána	1,868	1,747	1,865	1,881	1,582
5	Bombay Suburban	248	251	224	261	210
6	Kolába	1,537	1,112	1,174	1,264	1,928
7	Bombay City	2,288	2,385	2,429	12,383	2,473
	Central Registration District.					
8	Ahmednagar	1,989	1,533	1,658	2,230	2,435
9	Poona	2,384	1,875	2,040	2,466	2,950
10	Sholápur	2,068	1,687	2,008	1,859	2,555
11	Sátára	3,181	2,410	2,225	2,157	3,029
12	Ratnágiri	2,744	2,399	2,247	2,453	2,310
	Southern Registration District.					
13	Belgaum	2,041	1,782	2,438	3,161	2,953
14	Dhárwár	2,929	2,572	3·501	3,029	2,432
15	Bijápur	1,853	1,660	2,018	2,015	2,144
16	Kánara	1,414	1,199	1,166	1,344	790
	Gujarát Registration District.					
17	Surat	1,892	1,720	2,058	2,012	1,832
18	Broach	1,063	1,115	1,218	932	815
19	Kaira	1,493	1,569	2,987	2,366	1,878
20	Panch Mahals	847	688	879	915	736
21	Ahmedabad	2,655	2,769	3,718	3,746	2,893
	Sind Registration District.					
22	Karáchi	1,750	1,752	1,302	983	954
23	Hyderabad	1,022	899	1,021	708	632
24	Thar and Párkar	668	641	669	503	458
25	Nawabshah	871	673	636	651	565
26	Lárkána	1,291	1,085	1,030	997	903
27	Sukkur	879	742	687	881	848
28	Upper Sind Frontier	360	252	287	255	209
	Total for the Presidency ...	48,380	42,069	48,447	51,334	48,747
	Ratio of deaths per 1,000 in each month	2·52	2·20	2·53	2·68	2·54

of the BOMBAY PRESIDENCY *during each month of the year 1929.*

June.	July.	August.	September.	October.	November.	December.	4 Total Deaths registered during the year.	5 Number.
2,277	2,979	5,320	3,244	2,810	3,014	3,277	38,631	1
1,356	1,607	2,404	1 902	1,554	1,676	2,026	22,170	2
1,845	2,388	2,576	2,514	2,563	2,317	2,358	29,718	3
1,180	1,201	1,429	1,301	1 318	1,787	1,877	18,981	4
167	209	268	220	284	270	307	2,919	5
923	1,240	1,318	1,280	1,190	1,391	1,574	15,181	6
1,915	2,031	3,121	2,019	2,147	2,123	2,042	26,306	7
1,875	2,649	2,380	2,069	2,272	2,239	2,044	25,373	8
2,284	2,530	2,521	2,390	2,457	2,498	2,928	29,323	9
1,723	2,752	3,102	2,660	3.052	2,899	2 561	28,921	10
2,511	2,980	3.141	3,325	3,590	3,445	3.298	35,242	11
1,980	2,401	2,429	2,215	2,110	2,120	2,451	27 859	12
2,334	2,713	2,931	3,075	3,502	3,177	2,847	32,954	13
1,968	2,340	2,754	3,165	3,590	3,598	3,561	35,439	14
1,563	2,162	2,238	2,270	2,603	2,954	2,692	26,272	15
780	909	854	752	766	917	1,073	11,964	16
1,397	1,456	1,533	1.404	1,337	1,320	1,932	19,803	17
576	578	702	676	748	703	884	10,012	18
1,435	1,546	1,851	1,774	1,747	1,586	1,957	22,189	19
574	573	705	738	755	706	826	8,942	20
1,853	1,839	2,160	2,204	1,994	2,212	2,938	30,981	21
694	698	1,138	1,480	1,241	1,270	1,308	14.565	22
562	451	698	759	768	945	1,061	9,526	23
348	305	321	307	454	561	682	6,017	24
525	424	313	682	1,031	1,502	1,017	8,890	25
841	1,429	4.306	1,824	2,179	3,047	2,372	21,313	26
544	939	1,353	1,455	3,339	3,626	3,350	18,743	27
210	208	364	520	1,230	1,723	1,254	6,812	28
36,442	43,487	53,220	48,174	52,631	55,623	56,492	585,046	
1·90	2·27	2·78	2·51	2·75	2·90	2·95	·30·53	

ANNUAL FORM NO. IV.—DEATHS *registered according to* AGE *in*

1	2	3	
		Under 1 year.	
No.	Districts.	Male.	Female.
	Western Registration District.		
1	East Khándesh	6,207	5,487
2	West Khándesh	3,562	3,200
3	Násik	4,698	3,892
4	Thána	1,964	1,702
5	Bombay Suburban	350	328
6	Kolába	1,979	1,659
7	Bombay City	3,874	3,314
	Central Registration District.		
8	Ahmednagar	4,356	3,632
9	Poona	4,332	3,546
10	Sholápur	4,297	3,463
11	Sátára	4,412	3,670
12	Ratnágiri	2,278	1,835
	Southern Registration District.		
13	Belgaum	3,501	2,859
14	Dhárwár	3,495	2,890
15	Bijápur	3,072	2,624
16	Kánara	1,477	1,254
	Gujarat Registration District.		
17	Surat	2,778	2,384
18	Broach	1,429	1,293
19	Kaira	2,582	2,295
20	Panch Mahals	1,161	985
21	Ahmedabad	4,150	3,670
	Sind Registration District.		
22	Karachi	1,953	1,619
23	Hyderabad	1,090	936
24	Thar and Parkar	613	529
25	Nawabshah	857	768
26	Lárkana	1,585	1,382
27	Sukkur	2,255	2,139
28	Upper Sind Frontier	586	524
	Total for the Presidency ...	74,793	63,809
	Population according to Census of 1921 ...	287,146	282,999
	Ratios per 1,000 living ...	260·47	225·47

the DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1929.*

4		5		6		7	
1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
5,843	6,016	1,031	1,034	417	472	320	560
3,463	3,578	678	674	248	283	174	294
3,536	3,681	829	811	464	537	340	504
1,840	1,915	518	567	268	265	244	286
243	263	65	77	28	39	42	60
1,453	1,468	420	427	178	150	151	187
2,339	2,360	378	431	205	316	405	503
2,946	2,774	449	497	281	278	205	331
3,682	3,302	435	523	307	343	372	640
3,357	3,509	685	701	404	488	259	465
3,741	3,699	919	1,086	606	728	467	747
2,090	2,311	669	700	337	325	353	399
3,765	4,019	1,102	1,282	619	751	430	538
3,556	3,752	1,148	1,402	601	1,063	533	743
3,035	3,418	804	877	322	343	246	319
548	652	177	219	142	136	162	265
2,046	2,124	390	410	199	237	183	282
1,247	1,185	180	197	84	110	80	126
2,897	2,664	437	415	260	252	242	238
883	935	261	239	139	84	98	118
3,960	3,901	679	665	329	347	370	451
1,477	1,376	444	399	276	348	305	318
660	616	221	196	168	126	183	218
322	258	133	140	117	124	128	113
1,020	1,004	376	339	187	142	133	122
2,531	2,403	1,026	908	556	356	398	329
2,547	2,580	574	590	290	229	258	341
1,170	1,109	278	236	120	104	166	107
66,077	66,762	15,306	16,047	8,347	8,896	7,187	9,604
885,160	924,937	1,468,775	1,379,851	1,224,010	969,652	751,226	650,813
74·65	72·18	10·42	11·63	6·82	9·17	9·57	14·76

ANNUAL FORM

1	2	3	
		20 and under 30.	
No.	Districts.	Male.	Female.
	Western Registration District.		
1	East Khándesh	683	1,051
2	West Khándesh	342	565
3	Násik	727	1,000
4	Thána	648	978
5	Bombay Suburban	130	166
6	Kolába	406	604
7	Bombay City	1,581	1,383
	Central Registration District.		
8	Ahmednagar	500	725
9	Poona	874	1,254
10	Sholápur	678	1,070
11	Sátára	994	1,476
12	Ratnágiri	939	1,199
	Southern Registration District.		
13	Belgaum	969	1,288
14	Dhárwár	1,237	1,876
15	Bijápur	620	853
16	Kánara	546	775
	Gujarat Registration District.		
17	Surat	575	812
18	Broach	214	338
19	Kaira	642	738
20	Panch Mahàls	274	346
21	Ahmedabad	1,053	1,046
	Sind Registration District.		
22	Karáchi	776	797
23	Hyderabad	596	610
24	Thar and Párkar	376	370
25	Nawábsháh	389	458
26	Lárkána	1,047	1,205
27	Sukkur	661	787
28	Upper Sind Frontier	222	269
	Total for the Presidency ...	18,639	24,039
	Population according to Census of 1921 ...	1,781,925	1,656,476
	Ratios per 1,000 living ...	10·46	14·51

No. IV—*contd.*

9		10		11		12		13
30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	No.
865	862	954	650	983	762	2,237	2,187	1
466	482	513	362	606	349	1,140	1,201	2
900	940	878	649	966	683	1,863	1,950	3
1,033	902	1,052	625	958	571	1,356	1,388	4
167	124	129	88	120	76	223	216	5
584	592	618	464	699	556	1,227	1,356	6
1,784	981	1,279	685	1,128	545	1,595	1,380	7
593	611	752	564	803	647	2,245	2,179	8
988	898	979	774	1,115	1,103	1,883	1,973	9
752	849	741	610	777	744	2,541	2,531	10
1,086	1,234	1,067	941	1,293	1,074	2,883	3,169	11
931	1,252	1,037	942	1,309	1,128	3,626	4,159	12
1,138	1,056	1,138	782	1,172	864	2,771	2,910	13
1,420	1,552	1,349	1,087	1,206	1,005	2,597	2,707	14
744	783	837	594	882	711	2,534	2,654	15
714	654	729	482	610	425	926	1,071	16
652	696	742	509	799	576	1,735	1,674	17
305	292	302	264	402	354	803	807	18
803	708	898	704	1,009	805	1,841	1,810	19
343	318	343	240	451	253	771	700	20
1,167	1,004	1,253	918	1,274	918	1,959	1,867	21
759	575	682	345	544	241	830	601	22
644	510	588	305	411	213	749	486	23
466	346	398	209	366	179	489	341	24
426	415	420	244	359	187	613	431	25
1,202	1,054	993	689	782	480	1,368	1,079	26
593	615	611	411	547	358	1,245	1,112	27
218	265	241	173	174	129	439	343	28
31,782	30,571	21,523	15,309	21,685	15,946	44,439	44,285	
1,642,370	1,349,143	1,025,092	901,969	615,661	556,308	457,220	480,976	
13·26	15·25	21·00	16·97	35·22	28·65	97·19	92·07	

ANNUAL FORM NO. IV (*a*).—*Showing the details of* DEATHS *during the*

No.	Districts.	Deaths						
		Not exceeding one month.						
		Male.			Female.			Total of columns 5 and 8.
		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.	
1	2	3	4	5	6	7	8	9
	Western Registration District.							
1	East Khándesh	1,100	925	2,025	942	833	1,775	3,800
2	West Khándesh	589	536	1,125	486	473	959	2,084
3	Násik	969	794	1,763	707	629	1,336	3,099
4	Thána	554	351	905	444	275	719	1,624
5	Bombay Suburban	102	49	151	86	45	131	282
6	Kolába	711	352	1,063	584	297	881	1,944
7	Bombay City	872	507	1,379	662	420	1,082	2,461
	Central Registration District.							
8	Ahmednagar	941	708	1,649	785	516	1,301	2,950
9	Poona	888	732	1,620	663	613	1,276	2,896
10	Sholápur	960	642	1,602	737	502	1,239	2,841
11	Sátára	882	578	1,460	709	474	1,183	2,643
12	Ratnágiri	589	488	1,077	478	354	832	1,909
	Southern Registration District.							
13	Belgaum	817	733	1,550	627	569	1,196	2,746
14	Dhárwár	737	657	1,394	584	529	1,113	2,507
15	Bijapur	641	516	1,157	497	465	962	2,119
16	Kánara	619	353	972	532	293	825	1,797
	Gujarát Registration District.							
17	Surat	697	456	1,153	507	376	883	2,036
18	Broach	333	246	579	274	238	512	1,091
19	Kaira	372	469	841	354	475	829	1,670
20	Panch Mahals	221	215	436	209	164	373	809
21	Ahmedabad	718	588	1,306	519	506	1,025	2,331
	Sind Registration District.							
22	Karachi	440	292	732	346	226	572	1,304
23	Hyderabad	284	193	477	215	178	393	870
24	Thar and Párkar	173	128	301	175	118	293	594
25	Nawabshah	202	137	339	196	112	308	647
26	Lárkána	245	228	473	238	148	386	859
27	Sukkur	297	258	555	242	235	477	1,032
28	Upper Sind Frontier ...	106	63	169	65	56	121	290
	Total for the Presidency ...	16,059	12,194	28,253	12,863	10,119	22,982	51,235

under one year IN THE DISTRICTS *of the* BOMBAY PRESIDENCY *year 1929*

UNDER ONE YEAR.

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total, Male, columns 5, 10 and 13.	Total, Female, columns 8, 11 and 14.	Total.	No.
Male.	Female.	Total.	Male.	Female.	Total.				
10	11	12	13	14	15	16	17	18	19
2,378	2,123	4,501	1,804	1,589	3,393	6,207	5,487	11,694	1
1,393	1,288	2,681	1,044	953	1,997	3,502	3,200	6,762	2
1,747	1,479	3,226	1,168	1,007	2,195	4,698	3,822	8,520	3
720	637	1,357	339	346	685	1,964	1,702	3,666	4
118	104	222	81	93	174	350	328	678	5
642	529	1,171	274	249	523	1,979	1,659	3,638	6
1,125	991	2,116	1,370	1,241	2,611	3,874	3,314	7,188	7
1,467	1,258	2,725	1,240	1,073	2,313	4,356	3,632	7,988	8
1,500	1,347	2,847	1,112	923	2,035	4,332	3,546	7,878	9
1,666	1,419	3,085	1,029	805	1,834	4,297	3,463	7,760	10
1,842	1,598	3,440	1,110	889	1,999	4,412	3,670	8,082	11
744	594	1,338	457	409	866	2,278	1,835	4,113	12
1,137	984	2,121	814	679	1,493	3,501	2,859	6,360	13
1,286	1,029	2,315	815	748	1,563	3,495	2,890	6,385	14
1,217	1,058	2,275	698	604	1,302	3,072	2,624	5,696	15
356	284	640	149	145	294	1,477	1,254	2,731	16
929	833	1,762	696	668	1,364	2,778	2,384	5,162	17
517	440	957	333	341	674	1,429	1,293	2,722	18
970	834	1,804	721	632	1,353	2,532	2,295	4,827	19
485	407	892	240	205	445	1,161	985	2,146	20
1,356	1,147	2,503	1,488	1,498	2,986	4,150	3,670	7,820	21
625	493	1,118	596	554	1,150	1,953	1,619	3,572	22
319	298	617	294	245	539	1,090	936	2,026	23
158	119	277	154	117	271	613	529	1,142	24
279	238	517	239	222	461	857	768	1,625	25
525	452	977	587	544	1,081	1,585	1,382	2,917	26
781	719	1,450	969	943	1,912	2,255	2,139	4,394	27
225	210	435	192	193	385	586	524	1,110	28
26,557	22,912	49,469	19,983	17,915	37,898	74,793	63,809	138,602	

ANNUAL FORM No. V.—DEATHS *registered according* PRESIDENCY *during*

1	2	POPULATION			
No.	Districts.	Muhammadans.		Hindus.	
		Male.	Female.	Male.	Female.
	Western Registration District.				
1	East Khandesh	55,176	52,389	484,070	472,143
2	West Khandesh	16,011	15,346	262,850	256,881
3	Nasik	23,806	21,948	388,491	379,357
4	Thana	17,411	14,461	354,764	338,299
5	Bombay Suburban	8,728	5,625	65,684	46,744
6	Kolaba	14,012	14,342	262,562	266,748
7	Bombay City	126,177	57,210	543,171	269,272
	Central Registration District.				
8	Ahmednagar	18,966	17,870	327,801	325,681
9	Poona	23,591	19,913	465,217	454,887
10	Sholapur	30,467	28,235	346,655	326,393
11	Satara	18,337	17,652	483,403	488,459
12	Ratnagiri	34,410	46,581	466,985	578,134
	Southern Registration District.				
13	Belgaum	40,875	38,943	416,962	403,209
14	Dharwar	73,484	69,553	446,006	430,468
15	Bijapur	48,940	47,185	354,458	342,191
16	Kanara	12,580	13,822	182,587	175,191
	Gujarat Registration District.				
17	Surat	28,071	28,179	279,833	280,147
18	Broach	36,085	33,903	117,003	110,217
19	Kaira	34,193	31,022	328,634	284,525
20	Panch Mahals	13,888	12,797	171,905	161,201
21	Ahmedabad	53,637	45,433	399,443	348,852
	Sind Registration District.				
22	Karachi	213,208	168,986	82,381	53,744
23	Hyderabad	231,341	178,455	87,318	71,811
24	Thar and Parkar	118,596	94,139	98,214	77,812
25	Nawabshah	181,280	139,855	52,448	44,900
26	Larkana	277,501	222,052	53,024	44,130
27	Sukkur	200,273	158,123	79,859	68,329
28	Upper Sind Frontier	120,494	95,783	13,561	10,294
	Total for the Presidency ...	2,071,538	1,680,766	7,637,589	7,130,018

N.B.—This and all the other Statements refer to Indians only and not to Europeans. "Hindus"

Note.—Population by classes in Form V includes Jail figures.

to CLASSES *and* SEX *in the Districts of the* BOMBAY
the year 1929.

3

ACCORDING TO THE CENSUS OF 1921.

Jains.		Christians.		Parsis.		Other Classes.		Total.		Total.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
4,708	3,992	625	518	261	178	536	582	545,376	529,746	1,075,122
2,255	1,832	543	445	120	70	28,244	28,649	309,511	303,201	612,712
4,076	3,445	1,577	1,524	509	400	51	32	418,516	406,706	825,216
1,524	744	13,389	13,112	1,532	1,907	159	150	388,310	368,589	756,899
1,354	632	10,471	9,608	1,246	1,199	84	66	87,567	63,874	151,441
1,153	487	622	482	177	139	837	925	279,350	283,122	562,472
17,587	6,297	32,198	16,096	27,948	24,286	5,505	3,718	751,948	396,867	1,148,815
6,887	6,171	10,967	11,185	90	90	62	34	364,753	361,031	725,784
6,706	4,984	5,109	5,448	1,557	1,510	454	448	500,601	487,080	987,681
4,015	3,413	1,067	1,055	170	161	...	...	382,374	359,256	741,630
8,104	7,197	1,102	886	261	237	31	26	511,238	514,457	1,025,695
819	821	3,078	3,339	22	14	16	11	525,085	628,895	1,153,980
21,868	19,987	2,963	2,840	59	62	22	7	484,615	465,047	949,662
5,741	4,809	3,321	2,888	129	121	45	24	528,348	507,861	1,036,209
1,675	1,320	537	526	19	11	...	...	405,148	391,208	796,356
595	519	8,051	7,994	9	4	1	...	203,950	197,526	401,476
5,427	4,817	948	680	5,037	6,014	17,960	17,008	337,276	336,845	674,121
1,753	1,497	1,406	1,178	1,045	1,176	1,271	1,172	158,568	149,143	307,711
3,210	3,128	13,276	12,236	54	40	335	252	379,702	331,208	710,905
956	857	1,626	1,555	127	113	4,883	4,923	193,385	181,446	374,831
18,353	17,094	2,424	1,947	861	802	174	173	473,693	414,231	887,924
635	483	3,611	2,348	1,396	1,323	1,899	1,219	302,563	228,094	530,657
45	37	127	87	34	23	14	8	316,834	250,415	567,249
150	118	43	16	4	4	4,067	3,144	221,074	175,233	396,307
1	...	19	13	3	...	75	58	233,826	184,826	418,652
...	...	27	9	2	...	650	542	331,204	266,733	597,937
8	8	161	117	67	56	1,836	1,252	281,493	227,869	509,362
20	20	4	6	...	...	233	190	134,321	106,293	240,614
119,619	94,709	119,242	98,138	42,739	39,940	69,444	64,613	10,050,623	9,116,797	19,167,420

include Hindus of all castes. "Other Classes" include Buddhists, Sikhs, Jews and all others.

1	2				
No.	Districts	Muhammadans.		Hindus.	
		Male.	Female.	Male.	Female.
	Western Registration District.				
1	East Khandesh	1,409	1,309	18,126	17,759
2	West Khandesh	385	420	10,781	10,646
3	Nasik	1,139	1,017	13,950	13,518
4	Thana	418	400	9,119	8,420
5	Bombay Suburban	137	127	1,145	1,069
6	Kolaba	377	403	7,313	7,025
7	Bombay City	3,101	2,471	9,491	7,879
	Central Registration District.				
8	Ahmednagar	604	588	12,449	11,575
9	Poona	616	667	14,296	13,633
10	Sholapur	996	1,042	13,416	13,301
11	Satara	545	534	16,728	17,154
12	Ratnagiri	836	845	12,725	12,366
	Southern Registration District.				
13	Belgaum	1,384	1,336	14,549	14,359
14	Dharwar	2,380	2,440	14,787	15,428
15	Bijapur	1,395	1,460	11,657	11,659
16	Kanara	349	370	5,442	5,331
	Gujarat Registration District.				
17	Surat	874	954	8,988	8,487
18	Broach	1,075	1,061	3,698	3,839
19	Kaira	1,078	996	10,282	9,461
20	Panch Mahals	263	267	4,416	3,918
21	Ahmedabad	2,050	1,989	13,541	12,197
	Sind Registration District.				
22	Karachi	5,361	4,069	2,557	2,365
23	Hyderabad	3,348	2,488	1,961	1,722
24	Thar and Parkar	1,893	1,508	1,514	1,099
25	Nawabshah	3,432	2,788	1,348	1,322
26	Larkana	9,172	7,636	2,256	2,249
27	Sukkur	6,027	5,432	3,509	3,707
28	Upper Sind Frontier	3,068	2,796	466	462
	Total for the Presidency ...	53,772	47,428	240,710	232,838

No. V—*contd.*

4

NUMBER OF DEATHS REGISTERED.

Jains.		Christians.		Parsis.		Other Classes.		Total.		Total.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
5	4	8	7	...	1	2	1	19,550	19,081	38,631
7	10	9	12	...	...	...	...	11,182	10,988	22,170
22	24	24	20	4	3	2	...	15,141	14,577	29,718
7	6	308	251	25	21	4	2	9,881	9,100	18,981
8	7	181	227	10	7	1	...	1,482	1,437	2,919
...	1	10	13	2	...	13	24	7,715	7,466	15,181
362	343	764	648	478	451	127	105	14,408	11,898	26,306
16	14	56	66	...	...	...	...	13,135	12,238	25,373
16	16	26	31	13	10	1	4	14,962	14,361	29,323
67	75	11	12	1	...	...	...	14,491	14,430	28,941
135	125	7	10	2	1	...	...	17,416	17,824	35,242
7	7	41	32	...	...	...	...	13,609	14,250	27,859
601	593	70	61	1	...	...	...	16,605	16,349	32,954
172	172	58	57	...	...	...	...	17,342	18,097	35,439
31	24	10	12	...	1	...	...	13,096	13,176	26,272
14	13	225	219	1	...	...	...	6,031	5,933	11,964
193	189	9	12	96	112	...	...	10,099	9,704	19,803
33	26	7	6	17	16	25	25	5,046	4,966	10,012
54	50	141	115	...	...	5	7	11,560	10,629	22,189
31	19	14	13	...	1	...	...	4,724	4,218	8,942
504	523	51	55	23	12	25	11	16,194	14,787	30,981
...	1	72	47	29	17	27	20	8,046	6,519	14,565
...	...	...	3	...	...	1	3	5,310	4,216	9,526
1	1	...	1	...	...	...	...	3,408	2,609	6,017
...	...	...	...	...	...	...	...	4,780	4,110	8,890
...	...	...	...	...	...	...	...	11,428	9,885	21,313
...	...	21	6	...	1	24	16	9,581	9,162	18,743
...	...	...	...	...	...	...	...	3,554	3,258	6,812
2,313	2,193	2,128	1,936	697	654	258	219	299,778	285,268	585,046

1	2							
No.	Districts.	Muhammadans.		Hindus.		Jains.	
		Male.	Female.	Male.	Female.	Male.	Female.
	Western Registration District.						
1	East Khandesh	25·53	25·01	37·44	37·61	1·06	1·00
2	West Khandesh	23·18	26·41	39·57	39·69	3·05	5·42
3	Nasik	47·84	46·33	35·91	35·62	5·39	6·97
4	Thana	24·01	27·62	25·70	24·89	4·59	8·06
5	Bombay Suburban	15·70	22·28	17·43	23·87	5·91	11·07
6	Kolaba	26·90	28·10	27·85	26·34	...	2·06
7	Bombay City	25·29	43·19	17·47	27·24	20·58	54·47
	Central Registration District.						
8	Ahmednagar	31·85	32·62	37·98	35·85	2·33	2·37
9	Poona	26·11	33·50	30·73	29·97	1·49	3·31
10	Sholapur	32·69	36·90	38·61	40·66	16·69	18·68
11	Satara	29·72	30·25	34·66	35·15	16·78	17·87
12	Ratnagiri	24·30	19·12	27·25	23·12	8·55	8·53
	Southern Registration District.						
13	Belgaum	33·86	34·31	34·73	35·12	27·48	29·67
14	Dharwar	31·71	35·08	33·15	35·08	29·96	35·35
15	Bijapur	28·50	31·37	32·89	34·07	20·30	18·18
16	Kanara	27·74	26·77	29·76	30·43	23·53	25·05
	Gujarat Registration District.						
17	Surat	31·13	33·86	32·12	30·29	24·32	28·86
18	Broach	29·71	31·29	33·31	34·77	13·08	17·36
19	Kaira	31·53	32·10	31·29	33·20	16·82	15·98
20	Panch Mahals	16·94	23·64	25·69	24·30	32·42	22·17
21	Ahmedabad	38·22	43·78	33·30	34·96	27·46	30·59
	Sind Registration District.						
22	Karachi	26·14	24·07	31·04	44·00	...	2·07
23	Hyderabad	14·47	13·94	22·46	28·97	...	...
24	Thar and Parkar	15·10	16·01	15·42	14·12	6·66	8·47
25	Nawabshah	18·03	19·93	25·70	29·44	...	...
26	Larkana	33·05	34·38	42·55	50·96	...	...
27	Sukkur	30·09	34·35	43·94	54·25	...	...
28	Upper Sind Frontier	25·63	29·19	34·36	44·88	...	...
	Total for the Presidency	25·96	28·07	31·52	32·65	18·59	28·15

No. V—*concld.*

5

RATIO OF DEATHS PER 1,000 OF POPULATION.

Christians.		Parsis.		Other Classes.		Total.		
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Total.
12·60	13·61	...	5·61	3·73	1·71	35·84	36·02	35·93
16·48	26·90	...	...	...	...	34·33	34·64	34·54
15·21	13·12	7·85	7·50	39·22	...	36·18	35·84	36·01
23·09	19·14	16·32	11·01	25·16	13·33	25·42	24·68	25·06
17·18	23·64	8·03	5·84	11·90	...	16·91	22·50	19·26
16·08	26·95	11·30	...	15·53	25·94	27·87	26·37	26·99
23·73	40·26	16·92	18·57	23·07	28·51	19·16	20·98	22·90
6·02	5·90	...	...	...	...	36·19	33·90	35·05
5·09	5·69	8·35	6·62	2·20	8·93	29·89	29·48	29·69
10·30	11·25	5·88	...	...	...	37·82	40·08	38·92
6·35	11·29	7·66	4·13	...	...	34·12	34·70	34·41
13·33	9·58	...	...	...	...	25·92	22·66	24·14
23·26	21·27	17·00	...	...	...	34·27	35·16	34·70
15·96	19·74	...	...	...	...	32·82	35·63	34·20
18·62	22·81	...	90·91	...	...	32·32	33·68	32·99
27·95	27·40	111·11	...	...	...	29·57	30·04	29·80
9·49	17·64	19·06	18·62	...	...	29·94	28·81	29·38
4·97	5·09	16·21	13·60	20·46	21·33	31·82	33·30	32·53
10·62	9·40	...	...	1·49	2·77	30·45	32·09	31·21
8·61	8·36	...	8·85	...	...	24·43	23·25	23·86
21·03	28·25	26·71	14·96	143·68	63·58	34·19	35·70	34·89
19·94	20·10	20·77	12·84	14·22	16·40	26·59	28·58	27·44
...	34·48	...	...	71·43	37·50	16·76	16·83	16·79
...	62·50	...	...	...	...	15·41	14·88	15·18
...	...	...	...	...	...	20·44	22·23	21·24
...	...	...	...	...	...	34·50	37·06	35·66
13·43	51·28	...	17·85	13·07	12·77	34·04	40·27	36·79
...	...	...	...	...	...	26·46	30·65	28·31
17·85	19·73	16·31	16·37	3·71	3·59	29·83	31·29	30·53

ANNUAL FORM No. VI.—DEATHS *registered from*
BOMBAY PRESIDENCY
Details regarding Births

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	A.—DISTRICTS (EXCLUDING TOWNS).					
	Western Registration District.					
1	East Khándesh	918,037	24,556	22,956	47,512	51·74
2	West Khándesh	568,809	15,750	15,031	30,781	54·12
3	Násik	705,858	19,516	18,410	37,926	53·73
4	Thána	694,658	12,589	11,738	24,327	35·02
5	Bombay Suburban	91,948	979	870	1,849	20·11
6	Kolába	533,270	11,819	11,602	23,421	43·92
	Central Registration District.					
7	Ahmednagar	667,106	19,636	18,842	38,478	57·67
8	Poona	770,334	16,508	15,364	31,872	41·37
9	Sholápur	576,538	13,825	13,260	27,085	46·98
10	Sátára	963,308	22,012	20,973	42,985	24·62
11	Ratnágirí	1,083,350	21,932	20,333	42,265	39·00
	Southern Registration District.					
12	Belgáum	871,163	19,712	19,137	38,849	44·57
13	Dhárwár	870,565	17,787	17,175	34,962	40·16
14	Bijápur	717,798	15,396	15,020	30,416	42·37
15	Kánara	350,246	6,671	6,483	13,154	37·55
	Gujarat Registration District.					
16	Surat	526,465	10,953	10,568	21,521	40·88
17	Broach	243,112	5,868	5,373	11,236	46·22
18	Káira	604,528	12,125	10,936	23,061	38·15
19	Panch Maháls	331,791	6,937	6,667	13,604	41·00
20	Ahmedabad	568,759	11,310	10,396	21,706	38·16
	Sind Registration District.					
21	Karáchi	307,576	2,707	1,884	4,591	14·93
22	Hyderabad	480,469	4,429	3,292	7,721	16·07
23	Thar and Párkar	386,343	5,956	4,766	10,722	27·75
24	Nawábsháh	402,915	6,073	4,458	10,531	26·14
25	Larkana	562,636	6,614	4,920	11,534	20·50
26	Sukkur	394,216	5,257	4,059	9,316	23·63
27	Upper Sind Frontier	230,036	3,004	2,129	5,133	22·31
	Total of Districts ...	15,421,829	319,916	296,642	616,558	39·98

different causes in the DISTRICTS *and* TOWNS *of the*
during the year 1929
also shown, column 4

5	6	7	8	9	10	11 INJURIES—(*continued on next page*).	
						Suicide.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Male.	Female.
1,534	1,764	...	17,128	1,426	4,255	6	2
275	1,365	1	9,533	531	2,396	4	9
299	606	470	11,343	1,046	4,409	1	4
6	477	101	7,152	681	3,953	15	15
3	62	...	396	220	565	5	2
...	362	28	5,128	1,054	3,378	9	9
31	252	1	6,037	1,252	4,816	4	9
...	263	120	10,283	1,243	3,803	7	4
3	111	1,453	8,285	1,370	2,417	15	7
6	142	4,822	12,803	1,992	2,690	13	13
...	426	5	8,655	1,120	3,926	5	5
2	213	3,164	8,574	3,187	3,802	32	39
4	405	5,007	9,856	794	2,824	36	30
1	143	221	10,900	1,606	2,732	33	22
13	23	111	4,207	658	908	4	4
...	62	92	5,475	433	5,413	12	8
...	14	...	8,866	142	2,369	4	...
...	57	...	6,132	622	6,665	15	20
14	50	...	4,577	139	1,289	8	4
5	292	...	9,957	326	2,812	7	13
1,255	30	...	3,496	37	746	1	...
201	6	...	5,378	21	538	...	...
2	15	...	4,326	15	814	2	1
245	79	...	7,491	17	266	...	...
3,472	107	...	15,136	55	193	1	...
412	51	...	12,517	46	98	2	1
151	5	...	6,219	39	24	1	1
7,984	7,375	15,596	214,850	20,072	68,096	242	222

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1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or Accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	A.—DISTRICTS (EXCLUDING TOWNS).						
	Western Registration District.						
1	East Khandesh	161	25	11	205	8,074	34,386
2	West Khandesh	123	49	2	187	6,665	20,953
3	Nasik	171	36	7	219	7,002	25,394
4	Thana	189	180	6	405	4,826	17,601
5	Bombay Suburban	60	5	2	74	566	1,886
6	Kolaba	161	61	4	244	4,502	14,660
	Central Registration District.						
7	Ahmednagar	206	42	18	279	11,386	24,084
8	Poona	245	44	13	313	6,200	22,225
9	Sholapur	233	38	2	295	7,946	21,880
10	Satara	324	106	17	473	10,857	33,785
11	Ratnagiri	201	294	6	511	11,749	26,391
	Southern Registration District.						
12	Belgaum	365	48	7	491	11,013	30,446
13	Dharwar	255	41	3	365	11,078	30,333
14	Bijapur	245	37	4	341	7,584	23,623
15	Kanara	148	19	2	177	4,988	11,079
	Gujarat Registration District.						
16	Surat	112	26	2	160	2,669	14,804
17	Broach	61	29	...	94	1,680	8,165
18	Kaira	243	57	10	345	4,285	18,106
19	Panch Mahals	69	60	2	143	1,796	8,008
20	Ahmedabad	147	66	12	245	2,377	16,014
	Sind Registration District.						
21	Karachi	31	26	...	58	372	5,994
22	Hyderabad	61	35	...	96	364	6,604
23	Thar and Parkar	68	56	...	127	495	5,794
24	Nawabshah	79	36	...	115	314	8,627
25	Larkana	114	40	4	159	451	19,573
26	Sukkur	66	18	1	88	297	13,509
27	Upper Sind Frontier	34	7	...	43	66	6,547
	Total of Districts ...	4,172	1,481	135	6,252	129,601	469,776

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
1·67	1·92	...	18·65	1·55	4·63	·22	8·79	37·45	34·34
·48	2·40	·00	16·76	·98	4·21	·33	11·72	36·83	28·87
·42	·86	·67	16·07	1·48	6·24	·31	9·92	35·97	31·34
·01	·69	·14	10·30	·98	5·69	·58	6·95	25·34	22·48
·03	·67	...	4·31	2·39	6·15	·80	6·16	20·51	18·38
...	·61	·05	9·61	1·99	6·33	·46	8·44	27·49	26·61
·05	·42	...	9·04	1·88	7·22	·42	17·07	36·10	31·21
...	·34	·16	13·35	1·61	4·94	·40	8·05	28·85	26·70
·01	·19	2·52	14·36	2·38	4·20	·51	13·78	37·95	29·67
...	·15	5·01	13·29	2·07	2·79	·49	11·27	35·07	30·34
...	·39	·01	7·99	1·04	3·62	·47	10·84	24·36	23·58
·00	·24	3·63	9·84	3·66	4·36	·56	12·64	34·95	27·94
·01	·47	5·75	11·32	·90	3·24	·42	12·11	34·84	31·16
·00	·20	·31	15·19	2·24	3·81	·48	10·57	32·78	27·25
·04	·06	·31	12·01	1·88	2·58	·51	14·22	31·63	32·24
...	·11	·17	10·40	·82	10·26	·34	5·07	27·17	26·80
...	·06	...	15·90	·58	9·74	·39	6·91	33·58	33·70
...	·09	...	10·16	1·03	11·01	·57	7·09	29·95	28·18
·04	·15	...	13·79	·42	3·89	·43	5·42	24·14	22·86
·01	·51	...	17·50	·57	4·95	·43	4·18	28·15	25·25
4·08	·10	...	11·36	·12	2·42	·19	1·21	19·48	19·87
·42	·01	...	11·19	·05	1·12	·20	·76	13·75	16·04
·01	·04	...	11·19	·04	2·11	·33	1·28	15·00	19·81
·61	·20	...	18·59	·04	·66	·29	·78	21·16	16·28
6·17	·19	...	26·90	·10	·34	·28	·80	34·79	16·76
1·05	·13	...	31·75	·12	·25	·22	·76	34·27	18·11
·66	·02	...	27·03	·17	·10	·19	·29	28·46	13·08
·51	·48	1·01	13·93	1·30	4·42	·41	8·40	30·46	26·04

ANNUAL FORM

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS.					
	East Khándesh District.					
1	Jalgaon	23,696	390	309	699	29·54
2	Bhusáwal	24,933	367	316	683	27·49
3	Chopda	16,930	205	205	410	24·21
4	Dharangaon	14,824	277	248	525	35·43
5	Párola	12,079	273	219	492	40·73
6	Amalner	17,068	219	194	413	24·19
7	Erandol	12,489	285	247	532	42·59
8	Nasirabad	12,188	289	306	595	48·82
9	Chálisgaon	11,990	263	194	457	37·28
10	Yawal	10,888	119	101	220	20·20
	West Khandesh District.					
11	Dhulia	30,061	666	628	1,294	43·04
12	Nandurbár	13,842	317	280	597	43·13
	Nasik District.					
13	Násik	42,715	565	525	1,090	25·52
14	Yeola	13,911	182	150	332	23·85
15	Málegaon	23,711	370	289	659	27·76
16	Igatpuri	9,977	124	99	223	22·35
17	Manmád	11,866	126	134	260	21·91
18	Trimbak	4,538	88	83	171	37·68
19	Deoláli Cantonment	12,640	11	7	18	1·42
	Thana District.					
20	Thána	22,116	172	168	340	15·37
21	Bhiwandi	12,188	243	191	434	35·61
22	Kalyán	17,573	249	212	461	26·23
23	Bassein	10,364	106	91	197	19·01
	Bombay Suburban District.					
24	Bándra	28,738	390	327	717	24·95
25	Kurla	26,059	305	306	611	23·44
26	Santa Cruz Cantonment	4,701	5	2	7	1·48

No. VI—*contd.*

5	6	7	8	9	10	11 Injuries (*continued on next page*).	
						Suicide.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Male.	Female.
42	124	...	278	46	112	1	...
1	8	...	208	17	51	...	...
73	9	...	149	12	23	...	...
43	17	...	164	28	56	...	...
14	1	...	137	9	81	...	...
96	78	...	210	6	52	...	...
75	2	...	113	34	64	...	...
4	...	...	176	10	74	...	...
2	21	...	248	18	64	...	...
..	3	...	73	10	45	...	...
11	8	2	198	34	253	1	2
...	...	...	156	12	71	1	...
4	66	150	253	36	443	1	1
9	1	...	365	17	124	...	...
83	85	799	263	52	108	...	...
...	1	...	86	6	33	...	...
2	3	...	69	11	46	...	...
...	...	...	47	3	26	...	...
...	...	6	3	13	31	...	...
...	26	4	132	38	163	1	2
...	...	12	99	35	112	1	...
1	11	23	86	13	130	...	...
...	...	...	31	20	40	...	...
...	5	...	63	43	104	1	...
...	5	1	67	59	191	...	...
...	...	...	...	1	...	...	...

ANNUAL FORM

1	2	11 INJURIES—*contd.*				12	13
No.	Districts and Towns.	Wounding or Accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS.						
	East Khandesh District.						
1	Jalgaon	10	...	...	11	223	836
2	Bhusawal	7	1	...	8	166	459
3	Chopda	1	...	...	1	59	326
4	Dharangaon	4	...	...	4	147	469
5	Parola	2	...	...	2	93	387
6	Amalner	1	1	...	2	48	492
7	Erandol	4	...	...	4	121	413
8	Nasirabad	...	...	...	...	110	374
9	Chalisgaon	4	...	...	4	31	388
10	Yawal	3	...	...	3	27	161
	West Khandesh District.						
11	Dhulia	12	1	...	16	366	887
12	Nandurbar	...	...	...	1	90	330
	Nasik District.						
13	Nasik	27	2	1	32	635	1,669
14	Yeola	6	1	...	7	34	557
15	Malegaon	5	...	...	5	136	1,530
16	Igatpuri	6	...	...	6	50	182
17	Manmad	...	1	1	2	39	172
18	Trimbak	1	...	...	1	59	136
19	Deolali Cantonment	4	...	...	4	21	78
	Thana District.						
20	Thana	15	1	...	19	55	437
21	Bhiwandi	5	3	...	9	110	377
22	Kalyan	9	...	...	9	123	396
23	Bassein	1	...	...	1	78	170
	Bombay Suburban District.						
24	Bandra	8	...	...	9	228	462
25	Kurla	5	...	...	5	247	575
26	Santa Cruz Cantonment	...	...	...	...	5	6

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
1·77	5·31	...	11·73	1·09	4·73	·47	9·41	35·28	24·03
·04	·32	...	8·34	·68	2·04	·32	6·65	18·40	22·29
4·31	·53	...	8·89	·71	1·35	·06	3·48	19·25	19·96
2·89	1·14	...	11·06	1·89	2·78	·27	9·92	30·96	28·28
1·16	·08	...	11·34	·75	6·70	·16	7·69	27·87	31·96
5·62	4·57	...	12·30	·35	3·04	·12	2·81	28·62	15·15
6·01	·16	...	9·04	2·72	5·12	·32	9·69	33·07	29·77
·33	...	...	14·44	·82	6·07	...	9·02	30·69	39·54
·17	1·75	...	20·09	1·50	5·34	·33	2·59	32·36	24·85
...	·27	...	6·70	·92	4·13	·28	2·48	14·79	18·22
·37	·27	·07	6·59	1·13	8·41	·53	12·14	29·51	23·49
...	...	...	11·27	·87	5·13	·07	6·50	23·84	25·86
·09	1·55	3·51	5·92	2·01	10·37	·75	14·87	39·07	32·31
·65	·07	...	26·23	1·23	8·91	·50	2·44	40·04	13·82
3·46	3·58	33·70	11·09	2·20	4·55	·21	5·73	64·63	33·50
...	·10	...	8·62	·60	3·30	·60	5·01	18·24	19·29
·17	·35	...	5·81	·93	3·88	·17	3·28	14·49	6·09
...	...	...	10·35	·66	5·73	·22	13·00	29·97	18·06
...	...	·47	·24	1·03	2·53	·32	1·67	6·17	25·76
...	1·18	·18	5·97	1·71	7·37	·86	2·49	19·76	19·26
...	...	·99	8·12	2·87	9·19	·74	9·02	30·93	30·11
·06	·62	1·31	4·89	·74	7·40	·51	7·00	22·53	22·71
...	...	...	2·99	1·93	3·66	·10	7·52	16·40	20·04
..	·17	...	2·20	1·50	3·62	·31	7·93	15·73	15·41
...	·19	·04	2·58	2·26	7·33	·19	9·48	22·07	21·10
...	...	...	...	·21	...	...	1·06	1·27	1·28

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	*B.—TOWNS—*contd.*					
	Kolaba District.					
27	Alibág	5,253	74	66	140	26·65
28	Panwel	8,622	101	82	183	21·12
29	Mahád	7,192	60	51	111	15·43
30	Uran	8,135	80	73	153	18·80
31	City of Bombay	1,148,815	12,198	11,709	23,907	20·81
	Ahmednagar District.					
32	Ahmednagar	33,138	677	579	1,256	37·90
33	Sangamner	12,737	168	138	306	24·03
34	Ahmednagar Cantonment	10,997	163	146	309	28·10
	Poona District.					
35	Poona City	133,122	2,542	2,238	4,780	35·91
36	Poona Suburban	13,971	32	28	60	4·29
37	Bárámati	11,905	221	204	425	35·70
38	Khed	7,013	96	86	182	25·95
39	Lonávla	10,471	116	95	211	20·15
40	Junnár	7,376	127	131	258	34·98
41	Poona Cantonment	25,498	88	65	153	6·00
42	Kirkee do.	7,991	85	59	144	18·02
	Sholapur District.					
43	Sholápur	119,347	2,750	2,505	5,255	44·03
44	Bársi	22,074	360	329	689	31·21
45	Pandharpur	25,210	513	455	968	38·40
	Satara District.					
46	Sátara	22,454	225	192	417	18·57
47	Wái	10,208	134	95	229	22·43
48	Karád	11,255	131	86	217	19·28
49	Ashta	9,016	159	109	268	29·73
50	Islámpur	7,915	112	87	199	25·14
	Ratnagiri District.					
51	Ratnágiri	18,286	280	237	517	28·27
52	Vengurla	19,126	334	313	647	33·83
53	Málwan	22,213	297	300	597	26·88
54	Chiplun	11,005	180	151	331	30·08

No. VI—*contd.*

5	6	7	8	9	10	11	
						Injuries.	
						Suicide.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Male.	Female.
...	1	...	34	4	21	...	...
...	13	...	19	12	65	...	...
...	56	...	13	16	25	...	...
...	...	...	51	4	9	...	...
8	1,126	29	2,287	1,201	10,973	67	16
1	1	...	125	51	228	2	2
...	...	...	58	9	59	...	...
...	...	...	78	16	76	...	...
1	335	23	967	282	1,787	5	2
...	1	...	87	13	38	...	...
...	...	13	151	25	58	1	...
...	...	...	12	...	40	...	...
...	...	...	123	4	54	...	...
...	8	...	42	5	54	...	1
...	2	...	44	24	146	1	...
...	...	...	20	13	63	...	...
...	9	4	2,311	191	558	4	7
...	2	177	384	26	72	2	1
2	1	...	459	77	274	4	2
...	12	6	156	22	121	...	1
...	...	25	56	10	38	1	...
...	...	17	60	22	35	...	...
...	...	4	68	22	17	1	...
...	...	1	46	24	52	...	...
1	...	...	86	...	60	...	...
...	...	46	101	14	71	...	...
...	...	...	90	13	64	...	...
..	...	29	110	10	43	...	...

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1	2	11 INJURIES—*contd.*				12	13
No.	Districts and Towns.	Wounding or Accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*contd.*						
	Kolaba District.						
27	Alibag	1	...	1	2	26	88
28	Panwel	2	2	...	4	56	169
29	Mahad	5	1	...	6	59	175
30	Uran	2	...	...	2	23	59
31	City of Bombay	734	1	...	818	9,864	26,306
	Ahmednagar District.						
32	Ahmednagar	16	1	...	22	329	757
33	Sangamner	2	...	...	2	136	259
34	Ahmednagar Cantonment	3	...	...	3	100	273
	Poona District.						
35	Poona City	26	...	...	33	2,022	5,450
36	Poona Suburban	4	2	...	6	60	205
37	Baramati	9	...	...	10	147	404
38	Khed	...	...	...	...	42	94
39	Lonavla	22	...	...	32	55	258
40	Junnar	2	...	...	3	55	167
41	Poona Cantonment	3	...	1	5	96	317
42	Kirkee do.	2	...	...	2	102	303
	Sholapur District.						
43	Sholapur	35	7	6	59	1,466	4,598
44	Barsi	13	...	...	16	405	1,082
45	Pandharpur	9	4	...	19	529	1,361
	Satara District.						
46	Satara	17	1	...	19	264	600
47	Wai	2	...	1	4	95	228
48	Karad	2	1	...	3	103	240
49	Ashta	6	1	1	9	73	193
50	Islampur	4	1	...	5	68	195
	Ratnagiri District.						
51	Ratnagiri	4	...	...	4	136	287
52	Vengurla	6	2	1	9	287	508
53	Malwan	5	3	...	8	229	404
54	Chiplun	3	...	...	3	74	269

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
...	0·19	...	6·47	·76	4·00	·38	4·95	16·75	21·04
...	1·50	...	2·21	1·39	7·54	·46	6·50	19·60	20·06
...	7·79	...	1·81	2·22	3·48	·83	8·20	24·33	16·96
...	...	...	6·27	·49	1·10	·25	2·83	10·94	12·29
·01	0·98	·02	1·99	1·05	9·55	·71	8·59	22·90	27·20
·03	·05	...	3·77	1·54	6·88	·66	9·93	22·84	18·81
...	...	...	4·16	·71	4·63	·16	10·67	20·33	17·36
...	...	...	7·09	1·46	6·92	·27	9·09	24·83	19·19
·01	2·52	·17	7·26	2·12	13·43	·25	15·18	40·94	40·57
...	·07	...	6·23	·93	2·72	·43	4·29	14·67	15·46
...	...	1·09	12·68	2·10	4·87	·84	12·35	33·93	25·16
...	...	...	1·71	...	5·70	...	5·99	13·40	19·91
...	...	...	11·75	·38	5·16	2·10	5·25	24·64	25·52
...	1·08	...	5·69	·68	7·32	·41	7·46	22·64	22·28
...	·08	...	1·73	·94	5·73	·20	3·76	12·44	12·85
...	...	...	2·50	2·00	7·88	·25	12·77	25·40	31·86
...	·08	·03	19·37	1·60	4·68	·49	12·28	38·53	36·01
...	·09	8·02	17·39	1·18	3·27	·72	18·35	49·02	38·60
·08	·04	...	18·21	3·06	10·87	·75	20·98	53·99	56·40
...	·53	·27	6·95	·98	5·39	·85	11·75	26·72	28·11
...	...	2·45	5·49	·98	3·73	·39	9·30	22·34	22·63
...	...	1·51	5·33	1·95	3·11	·27	9·15	21·32	29·72
...	...	·44	7·54	2·44	1·69	1·00	8·10	21·41	20·25
...	...	·13	5·81	3·03	6·57	·63	8·59	24·76	21·72
·06	...	...	4·70	...	3·28	·22	7·43	15·69	18·03
...	...	2·41	5·28	·73	3·71	·17	13·96	26·56	24·79
...	...	...	4·04	·59	2·89	·36	10·31	18·19	20·26
...	....	2·64	9·99	·91	3·91	·27	6·72	24·44	19·31

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS—*contd.*					
	Belgaum District.					
55	Belgaum	36,214	575	497	1,072	29·60
56	Gokak	9,989	192	158	350	35·04
57	Athni	13,538	197	205	402	29·69
58	Nipani	11,878	207	173	380	31·99
59	Belgaum Cantonment	6,880	38	26	64	9·30
	Dharwar District.					
60	Dharwar	34,327	625	613	1,238	36·06
61	Hubli	69,140	1,124	1,004	2,128	30·78
62	Gadag-Bettigeri	41,158	813	741	1,554	37·76
63	Ranebennur	13,930	294	301	595	42·00
64	Nawalgund	7,089	94	87	181	25·53
	Bijapur District.					
65	Bijapur	32,471	568	506	1,074	33·08
66	Bagalkot	19,471	374	380	754	38·72
67	Gulodgud	14,760	349	326	675	45·73
68	Ilkal	11,856	241	242	483	40·74
	Kanara District.					
69	Karwar	14,463	201	179	380	26·27
70	Kumta	14,291	231	164	395	27·64
71	Gokarn	8,307	124	103	227	27·33
72	Honawar	7,035	126	138	264	37·53
73	Bhatkal	7,134	152	136	288	40·37
	Surat District.					
74	Surat	117,424	2,314	2,201	4,515	38·45
75	Bulsar	19,681	329	326	655	33·28
76	Rander	10,547	199	167	366	34·70
	Broach District.					
77	Broach	42,626	914	915	1,829	42·91
78	Jambusar.	10,217	229	246	475	46·49
79	Ankleshwar	11,756	230	206	436	37·09

No. VI—*contd.*

5	6	7	8	9	10	11	
						Injuries.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.	
						Male.	Female.
3	5	327	259	73	251	1	...
...	...	22	91	34	42	1	...
...	...	17	104	9	69	...	1
...	...	43	109	19	69	...	...
...	2	3	44	2	8	...	...
...	...	132	266	31	196	1	...
...	...	50	332	42	295	2	1
...	5	115	495	59	333	1	3
...	42	8	79	13	90	...	...
...	...	220	22	12	37	2	...
1	8	8	219	41	148	...	...
...	3	63	192	41	94	1	...
...	4	1	107	3	93	...	...
...	...	7	113	...	91	...	...
...	...	12	39	33	21	...	1
...	...	9	91	19	32	...	...
...	...	...	68	17	24	...	...
...	...	...	42	4	7	...	...
...	...	...	51	14	15	...	...
1	209	...	393	445	1,685	...	...
...	11	...	33	18	192	3	1
...	...	...	108	5	103	...	...
...	1	...	363	19	266	1	...
...	1	...	143	7	115	...	...
...	...	...	240	...	63	...	...

1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*contd.*						
	Belgaum District.						
55	Belgaum	19	...	...	20	530	1,468
56	Gokak	2	1	...	4	109	302
57	Athni	2	1	...	4	68	271
58	Nipani	6	2	...	8	106	354
59	Belgaum Cantonment	1	...	...	1	58	113
	Dharwar District.						
60	Dharwar	17	...	...	18	470	1,113
61	Hubli	23	2	1	29	741	1,489
62	Gadag-Bettigeri	28	...	1	33	597	1,637
63	Ranebennur	6	...	...	6	243	481
64	Nawalgund	4	1	1	8	78	386
	Bijapur District.						
65	Bijapur	14	2	2	18	493	936
66	Bagalkot	9	...	...	10	315	718
67	Guledgud	5	...	...	5	358	566
68	Ilkal	3	1	2	6	307	524
	Kanara District.						
69	Karwar	4	...	...	5	122	232
70	Kumta	2	...	...	2	72	225
71	Gokarn	4	...	...	4	88	201
72	Honawar	4	...	...	4	46	103
73	Bhatkal	1	...	...	1	46	124
	Surat District.						
74	Surat	35	1	...	36	2,009	4,778
75	Bulsar	5	...	...	9	177	440
76	Rander	2	...	...	2	68	281
	Broach District.						
77	Broach	23	3	...	27	476	1,152
78	Jambusar	3	1	...	4	85	365
79	Ankleshwar	2	...	...	2	35	340

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
·08	·14	9·03	7·15	2·02	6·93	·55	14·64	40·54	27·78
...	...	2·20	9·11	3·40	4·20	·40	10·91	30·23	29·43
...	...	1·24	7·68	·66	5·10	·30	5·02	20·02	18·17
...	...	3·62	9·18	1·60	5·81	·67	8·92	29·80	21·38
...	·29	·44	6·40	·29	1·16	·15	7·70	16·42	12·21
...	...	3·85	7·75	·90	5·71	·52	13·69	32·43	25·71
...	...	·72	4·80	·61	4·27	·42	10·72	21·54	22·85
...	·12	2·79	12·03	1·43	8·09	·80	14·50	39·77	36·18
...	3·09	·57	5·67	·93	6·46	·43	17·44	34·53	40·50
...	...	32·30	3·10	1·69	5·22	1·12	11·00	54·45	21·58
·03	·25	·25	6·74	1·26	4·56	·55	15·18	28·63	25·68
...	·15	3·24	9·86	2·11	4·83	·51	16·18	36·88	34·00
...	·27	·07	7·25	·20	6·30	·34	23·92	38·35	37·67
...	...	·59	9·53	...	7·68	·51	25·89	44·20	41·75
...	...	·83	2·70	2·28	1·45	·35	8·44	16·04	15·90
...	...	·63	6·37	1·33	2·24	·14	5·04	15·74	17·63
...	...	...	8·19	2·05	2·89	·48	10·59	24·20	22·15
...	...	...	5·97	·57	1·00	·67	6·54	14·64	21·03
...	...	...	7·15	1·54	2·10	·14	6·45	17·38	23·55
·01	1·78	...	3·35	3·79	14·35	·30	17·11	40·69	37·46
...	·56	...	1·67	·92	9·75	·46	9·00	22·36	19·79
...	...	...	10·24	·48	9·76	·19	5·97	26·64	23·99
...	·03	...	8·51	·45	6·24	·68	11·17	27·02	29·49
...	·10	...	14·00	·69	11·25	·39	8·32	34·75	31·49
...	...	...	20·41	...	5·36	·17	2·98	28·92	29·50

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—Towns—*contd.*					
	Kaira District.					
80	Kaira ...	8,277	146	147	293	35·40
81	Mehmedabad ...	6,236	160	141	301	48·27
82	Nadiad ...	31,919	598	560	1,158	36·28
83	Borsad ...	12,113	353	303	656	34·15
84	Anand ...	11,024	179	159	338	30·66
85	Umreth ...	14,024	319	282	601	42·85
86	Dakore ...	7,990	140	134	274	24·79
87	Kapadvanj ...	14,794	312	260	572	38·66
	Panch Mahals District					
88	Godhra ...	26,969	555	475	1,030	38·19
89	Dohad ...	16,071	256	263	519	32·29
	Ahmedabad District.					
90	Ahmedabad ...	270,599	6,549	6,175	12,724	47·02
91	Dhandhuka ...	8,056	221	178	399	49·52
92	Viramgaon ...	26,252	322	370	692	26·36
93	Dholka ...	12,513	336	324	660	52·74
94	Ahmedabad Cantonment. ...	1,745	16	10	26	14·89
	Karachi District.					
95	Karachi ...	199,014	5,718	5,403	11,121	55·83
96	Tatta ...	8,470	105	74	179	21·12
97	Kotri ...	9,072	60	69	129	14·20
98	Karachi Cantonment ...	6,525	123	123	246	37·70
	Hyderabad District.					
99	Hyderabad ...	72,625	1,381	1,629	3,010	41·44
100	Halla ...	5,757	73	67	140	24·28
101	Matiari ...	4,638	69	45	114	24·59
102	Hyderabad Cantonment ...	3,760	18	6	24	6·39
	Thar and Parkar District.					
103	Umarkot ...	4,199	72	54	126	30·02
104	Mirpurkhas ...	5,765	57	36	93	16·13

No. VI—*contd.*

5	6	7	8	9	10	11	
						Injuries.	
						Suicide.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Male.	Female.
...	1	...	72	10	94	...	...
...	10	...	187	11	50	...	...
...	115	...	728	12	283	1	2
...	17	...	296	30	41	...	...
...	...	...	224	3	35	...	...
...	...	...	168	5	247	...	...
...	18	...	142	13	68	2	...
...	6	...	195	11	104	1	...
...	17	...	513	5	53	...	...
...	...	...	273	4	14	1	...
...	254	1	5,315	403	3,757	4	1
...	11	...	103	5	76	...	...
...	23	...	481	13	288	...	...
...	2	...	185	3	70	...	...
...	...	...	18	2	7	...	...
21	309	...	1,835	491	2,740	2	...
30	49	...	95	8	59	...	...
47	...	...	98	15	55	...	...
...	2	...	35	5	18	1	...
28	24	...	342	121	1,095	...	...
13	1	...	59	...	10	...	...
7	...	...	59	1	16	...	...
...	...	...	19	...	4	...	...
...	...	...	41	1	37	...	...
1	...	...	60	4	27	...	...

1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*contd.*						
	Kaira District.						
80	Kaira ...	4	1	...	5	58	240
81	Mehmedabad ...	2	1	..	3	78	339
82	Nadiad ...	27	1	...	31	264	1,433
83	Borsad ...	...	...	...	...	140	524
84	Anand ...	8	...	...	8	25	295
85	Umreth ...	9	...	...	9	108	537
86	Dakore ...	5	...	...	7	53	301
87	Kapadvanj ...	4	...	...	5	93	414
	Panch Mahals District.						
88	Godhra ...	...	...	...	...	22	610
89	Dohad ..	4	1	...	6	27	324
	Ahmedabad District.						
90	Ahmedabad ...	157	3	5	170	3,603	13,503
91	Dhandhuka ...	2	...	...	2	45	242
92	Viramgaon ...	6	...	1	7	62	824
93	Dholka ...	2	2	1	5	105	370
94	Ahmedabad Cantonment ...	...	...	...	...	1	28
	Karachi District.						
95	Karachi ...	88	1	1	92	2,469	7,957
96	Tatta ...	2	...	...	2	33	276
97	Kotri ...	6	...	...	6	23	244
98	Karachi Cantonment ...	...	...	...	1	33	94
	Hyderabad District.						
99	Hyderabad ...	60	1	...	61	1,023	2,694
100	Halla ..	1	...	...	1	10	94
101	Matiari ...	2	...	...	2	21	106
102	Hyderabad Cantonment ...	...	...	...	...	5	28
	Thar and Parkar District.						
103	Umarkot ...	2	...	1	3	24	106
104	Mirpurkhas ...	6	1	...	7	18	117

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
.....	·12	...	8·70	1·21	11·35	·60	7·02	29·00	25·66
.....	1·60	...	29·99	1·76	8·02	·48	12·51	54·36	38·89
.....	3·60	...	22·81	·37	8·37	·97	8·27	44·59	36·10
.....	1·40	...	24·43	2·48	3·39	...	11·56	43·26	34·72
.....	...	...	20·32	·27	3·18	·72	2·27	26·76	24·18
.....	...	...	11·98	·36	17·61	·64	7·70	38·29	35·27
.....	2·26	...	17·77	1·63	8·51	·87	6·63	37·67	36·90
..	·40	...	13·18	·75	7·03	·34	6·28	27·98	29·16
.....	·63	...	19·02	·19	1·96	...	·82	22·62	21·36
.....	...	...	16·99	·25	·87	·37	1·68	20·16	23·72
.....	·94	...	19·63	1·49	13·89	·58	13·32	49·90	42·30
.....	1·37	...	12·78	·62	9·43	·25	5·59	30·04	30·91
.....	·88	...	16·42	·50	10·96	·27	2·36	31·39	30·63
.....	·16	...	14·79	·24	5·59	·40	8·39	29·57	30·17
.....	...	...	10·31	1·15	4·02	...	·57	16·05	19·52
·11	1·55	...	9·22	2·46	13·76	·46	12·41	39·97	29·92
3·54	5·78	...	11·22	·94	6·97	·24	3·89	32·58	16·42
5·17	...	...	10·80	1·66	6·05	·66	2·54	26·89	16·64
.....	·31	...	5·37	·76	2·76	·15	5·05	14·40	11·95
·33	·33	...	4·71	1·67	15·07	·84	14·08	37·09	32·55
2·23	·17	...	10·24	.....	1·74	·17	1·74	16·32	10·25
1·50	...	...	12·72	·22	3·45	·48	4·52	22·88	21·56
.....	...	...	5·05	.....	1·06	...	1·33	7·44	7·28
.....	...	...	9·76	·24	8·83	·72	5·70	25·25	29·05
·17	...	...	10·59	·68	4·69	1·22	8·14	20·29	22·02

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS—*concld.*					
	Nawabshah District.					
105	Nawabshah ...	2,771	54	18	72	25·98
106	Tando Adam ...	12,966	226	180	406	31·31
	Larkana District.					
107	Larkana ...	17,700	407	309	716	40·45
108	Kambar ...	7,613	128	92	220	28·89
109	Ratodero ...	5,565	100	94	194	34·86
110	Sehwan ...	4,423	40	30	70	15·82
	Sukkur District.					
111	Sukkur ...	42,046	718	600	1,318	31·34
112	Shikarpur ...	55,347	954	727	1,681	30·36
113	Rohri ...	11,378	183	173	356	31·29
114	Garhi Yasin ...	6,375	98	93	191	29·95
	Upper Sind Frontier District.					
115	Jacobabad ...	10,578	120	64	184	17·39
	Total of Towns ...	3,743,785	60,815	56,147	116,962	31·24
	Total for the Presidency ...	19,165,614	380,731	352,789	733,520	38·27

No. VI—*concld.*

5	6	7	8	9	10	11	
						Injuries.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.	
						Male.	Female.
.....	.....	.....	57	.....	2	.....	...
...	1	.....	184	7	83	.....	...
115	8	.....	311	25	82	.....	...
54	.....	.....	244	2	41	.....	...
42	8	.....	280	1	.....	.....	...
24	.....	.....	52	3	21	... ...	...
58	26	.....	1,168	29	106	.....	...
129	21	.....	1,275	62	211	2	...
29	5	.....	256	27	58	... ...	...
40	.....	.....	345	.....	2	.....	...
35	.....	.....	203	1	9	.....	...
1,150	3,260	2,418	31,578	5,036	31,800	122	47
9,084	10,635	18,014	246,428	25,108	99,896	364	269

ANNUAL FORM

1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or accident.	Snake-bite or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*concld.*						
	Nawabshah District.						
105	Nawabshah ...	...	1	...	1	5	65
106	Tando Adam ...	3	...	...	3	20	293
	Larkana District.						
107	Larkana ...	2	...	...	2	357	900
108	Kambar ...	2	...	...	2	18	361
109	Ratodero ...	1	...	...	1	5	337
110	Sehwan ...	1	...	...	1	41	142
	Sukkur District.						
111	Sukkur ...	30	...	1	31	172	1,590
112	Shikarpur ...	14	1	...	17	1,109	2,824
113	Rohri ...	3	1	...	4	42	421
114	Garhi Yasin ...	1	...	...	1	11	399
	Upper Sind Frontier District.						
115	Jacobabad ...	...	...	...	...	17	265
	Total of Towns ...	1,757	68	31	2,025	38,003	115,270
	Total for the Presidency ...	5,929	1,549	166	8,277	167,604	585,046

No. VI—*concld.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
.....	...	...	20·57	.....	·72	·36	1·80	23·45	23·35
.....	·08	...	14·19	·54	6·40	·23	1·54	22·98	13·03
6·50	·45	...	17·57	1·41	4·68	·11	20·17	50·84	29·26
7·09	...	...	32·05	·26	5·39	·26	2·37	47·42	22·72
7·55	1·44	...	50·31	·18	...	·18	·90	60·56	25·50
5·43	...	...	11·77	·69	4·75	·23	9·25	32·12	17·40
1·38	·61	...	27·77	·69	2·53	·74	4·09	37·81	18·50
2·33	·38	...	23·04	1·12	3·81	·31	20·03	51·02	29·68
2·54	·44	...	22·51	2·37	5·09	·36	3·69	37·00	20·62
6·27	...	...	54·12	.....	·31	·16	1·73	62·59	25·98
3·31	...	...	19·19	·09	·85	...	1·61	25·05	16·82
·31	·67	·65	8·43	1·36	8·49	·54	10·15	30·79	25·74
·47	·56	·94	12·86	1·31	5·21	·43	8·75	30·53	25·57

ANNUAL FORM No. VI (*a*).—DEATHS *registered from certain* *during the*

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	A.—DISTRICTS (EXCLUDING TOWNS).					
	Western Registration District.					
1	East Khándesh	918,037	1	·00	477	·51
2	West Khándesh	568,809	8	·01	769	1·35
3	Násik	705,858	2	·00	315	·45
4	Thána	694,658	136	·20	28	·04
5	Bombay Suburban	91,943	13	·14	8	·09
6	Kolaba	533,270	206	·39	48	·09
	Central Registration District.					
7	Ahmednagar	667,106	132	·20	250	·37
8	Poona	770,334	48	·06	88	·11
9	Sholápur	576,538	53	·09	204	·35
10	Sátára	963,308	44	·05	301	·31
11	Ratnágiri	1,083,350	68	·06	85	·08
	Southern Registration District.					
12	Belgaum	871,163	365	·42	918	1·05
13	Dhárwár	870,565	374	·43	404	·46
14	Bijápur	717,798	334	·47	118	·17
15	Kánara	350,246	324	·93	4	·01
	Gujarat Registration District.					
16	Surat	526,465	...	...	21	·04
17	Broach	243,112	...	...	5	·02
18	Kaira	604,528	...	...	61	·10
19	Panch Maháls	331,791	...	...	27	·08
20	Ahmedabad	568,759	...	...	405	·71
	Sind Registration District.					
21	Karáchi	307,576	8	·03	52	·17
22	Hyderabad	480,469	...	...	10	·02
23	Thar and Párkar	386,343	10	·03	21	·06
24	Nawábshah	402,915	12	·03	119	·30
25	Lárkana	562,636	...	...	158	·28
26	Sukkur ... —	394,216	...	...	36	·09
27	Upper Sind Frontier	230,036	1	·00	4	·02
	Total of Districts ...	15,421,829	2,139	·14	4,936	·32

diseases in the DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *year 1929*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	530	·57	16,112	17·55	8	·08
...	...	...	...	706	1·24	8,049	14·15	1	·00
...	...	...	...	2,146	3·04	8,880	12·58	...	...
...	...	...	...	1,291	1·86	5,696	8·20	1	·00
...	...	...	...	114	1·24	261	2·84	...	...
...	...	...	...	690	1·23	4,184	7·84	...	...
...	...	...	...	2,307	3·46	3,346	5·01	2	·00
...	...	...	...	3,418	4·44	6,729	8·74	...	...
...	...	...	...	429	·74	7,599	13·18	...	...
...	...	...	...	413	·43	12,045	12·50	...	...
...	...	...	...	126	·12	8,376	7·73	...	...
...	...	...	...	2,217	2·55	5,044	5·79	30	·03
...	...	...	...	1,980	2·27	7,035	8·08	63	·07
...	...	...	...	1,413	1·97	9,032	12·58	3	·00
...	...	...	...	1,106	3·16	2,753	7·86	20	·06
...	...	...	...	20	·04	5 433	10·32	1	·00
...	...	...	...	...	...	3,861	15·88	...	...
...	...	...	...	1	·00	6,070	10·06	...	...
...	...	...	...	13	·04	4,480	13·50	57	·17
...	...	...	...	132	·23	9,420	16·56	...	...
...	...	...	...	1,364	4·43	2,072	6·74	...	...
...	...	...	...	798	1·66	4,570	9·51	...	...
...	...	...	...	1,139	2·95	3,154	8·16	2	·01
...	...	...	...	1,738	4·31	5,622	13·95	...	...
...	...	...	...	1,455	2·59	13,523	24·04	...	...
...	...	...	...	1,504	3·81	10,970	27·83	7	·02
...	...	...	...	678	2·94	5,536	24·07	...	...
...	·00	...	...	27,728	1·80	179,852	11·66	195	·01

ANNUAL FORM

No.	Districts and Towns.	11 Pneumonia. Deaths.	11 Pneumonia. Ratio.	12 Phthisis. Deaths.	12 Phthisis. Ratio.	13 Other Respiratory diseases. Deaths.	13 Other Respiratory diseases. Ratio.
	A.—DISTRICTS (EXCLUDING TOWNS).						
	Western Registration District.						
1	East Khándesh	51	·05	989	1·02	3,265	3·55
2	West Khandesh	69	·12	562	·99	1,765	3·10
3	Nasik	448	·63	710	1·01	3,251	4·61
4	Thana	1,329	1·91	1,529	2·20	1,095	1·58
5	Bombay Suburban	200	2·17	128	1·40	237	2·58
6	Kolaba	502	·94	1,920	3·60	956	1·79
	Central Registration District.						
7	Ahmednagar	36	·05	438	·65	4,347	6·52
8	Poona	54	·07	664	·86	3,085	4·01
9	Sholapur	22	·04	351	·61	2,044	3·55
10	Satara	61	·06	798	·83	1,831	1·90
11	Ratnágiri	40	·04	2,192	2·02	1,694	1·56
	Southern Registration District.						
12	Belgaum	99	·11	806	·93	2,897	3·32
13	Dhárwár	31	·04	630	·72	2,168	2·48
14	Bijápur	16	·02	472	·65	2,244	3·13
15	Kánara	9	·03	201	·57	693	1·98
	Gujarat Registration District.						
16	Surat	1,421	2·69	550	1·04	3,442	6·53
17	Broach	439	1·80	222	·91	1,708	7·03
18	Kaira	472	·78	1,207	1·99	4,986	8·24
19	Panch Mahals	117	·35	225	·68	947	2·86
20	Ahmedabad	467	·82	795	1·40	1,550	2·73
	Sind Registration District.						
21	Karáchi	658	2·14	69	·23	19	·06
22	Hyderabad	445	·92	74	·15	19	·04
23	Thar and Párkar	706	1·83	65	·17	43	·11
24	Nawábshah	198	·49	45	·11	23	·06
25	Lárkana	77	·14	62	·11	54	·10
26	Sukkur	61	·15	25	·06	12	·03
27	Upper Sind Frontier	9	·04	11	·05	4	·02
	Total of Districts ...	8,037	·52	15,685	1·02	44,374	2·88

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.			Deaths under 1 year.				
Deaths.	Ratio.	Deaths.	Ratio.	Deaths from child birth.	Male.	Female.	Total.	Infant mortality rate per 1,000 births.	No.
349	·38	1,077	1·17	71	5,620	4,947	10,567	222·40	1
10	·02	521	·91	49	3,382	3,049	6,431	208·93	2
71	·10	975	1·38	289	4,243	3,455	7,698	202·97	3
162	·23	519	·75	169	1,837	1,611	3,448	141·74	4
49	·53	171	1·86	20	213	197	410	221·74	5
260	·49	794	1·50	125	1,933	1,625	3,558	151·91	6
46	·07	1,206	1·81	202	4,203	3,501	7,704	200·22	7
5	·00	1,238	1·61	180	3,245	2,655	5,900	185·12	8
...	...	1,370	2·38	138	3,215	2,627	5,842	215·69	9
36	·04	1,956	2·03	138	4,250	3,563	7,813	183·90	10
635	·59	485	·45	273	2,186	1,754	3,940	93·22	11
160	·18	3,037	3·47	203	3,315	2,734	6,049	155·71	12
150	·17	644	·74	232	3,097	2,534	5,631	161·06	13
86	·12	1,520	2·12	128	2,761	2,342	5,103	167·77	14
150	·43	508	1·45	315	1,406	1,197	2,603	197·89	15
173	·33	260	·49	46	1,842	1,506	3,348	155·57	16
35	·14	107	·44	33	1,196	1,108	2,304	205·06	17
205	·34	417	·69	41	1,929	1,779	3,708	160·79	18
26	·08	113	·34	79	1,010	839	1,849	135·91	19
119	·21	207	·36	12	1,731	1,458	3,189	146·92	20
12	·04	25	·08	76	470	417	887	193·20	21
8	·02	13	·03	131	684	544	1,228	159·05	22
7	·02	8	·02	125	597	509	1,106	103·15	23
6	·01	11	·03	131	806	732	1,539	146·05	24
39	·07	16	·03	221	1,333	1,175	2,508	217·44	25
9	·02	37	·09	116	1,544	1,495	3,039	326·21	26
24	·11	15	·07	22	561	500	1,061	206·70	27
2,832	·18	17,240	1·12	3,566	58,609	49,853	108,462	175·91	

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS.					
	East Khandesh District.					
1	Jalgaon	23,696	1	·04	35	1·48
2	Bhusáwal	24,933	...	...	30	1·20
3	Chopda	16,930	...	...	25	1·47
4	Dharangaon	14,824	...	...	10	·67
5	Parola	12,079	...	...	15	1·24
6	Amálner	17,068	...	...	12	·70
7	Erandol	12,469	...	...	...	...
8	Nasirabad	12,188	...	...	...	...
9	Chálisgaon	11,990	...	...	31	2·59
10	Yawal	10,888	...	...	...	...
	West Khandesh District.					
11	Dhulia	30,061	...	...	47	1·56
12	Nandurbar	13,842	...	...	10	·72
	Nasik District.					
13	Násik	42,715	...	...	35	·82
14	Yeola	13,911	...	...	5	·36
15	Málegaon	23,711	...	...	60	2·53
16	Igatpuri	9,977	...	...	1	·10
17	Manmad	11,866	...	...	5	·42
18	Trimbak	4,539	...	...	9	1·98
19	Deolali Cantonment	12,640.	...	...	...	...
	Thana District.					
20	Thána	22,116	5	·23	1	·04
21	Bhiwandi	12,188	...	...	1	·08
22	Kalyán	17,573	14	·80	9	·51
23	Bassein	10,864	...	...	...	...
	Bombay Suburban District.					
24	Bandra	28,738	6	·21	3	·10
25	Kurla	26,059	...	...	7	·27
26	Santa Cruz Cantonment	4,701	...	...	...	...
	Kolaba District.					
27	Alibág	5,253	...	...	...	...
28	Panvel	8,622	2	·23	...	...
29	Mahád	7,192	2	·28	1	·14

No. VI (*a*)—*contd.*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	3	·12	239	10·09	...	...
...	...	...	...	1	·04	176	7·06	1	·04
...	...	...	...	...	...	124	7·32	...	...
...	...	...	...	...	...	154	10·39	...	...
...	...	...	...	...	...	122	10·10	...	...
...	...	...	...	1	·06	197	10·09	...	...
...	...	...	...	...	...	113	9·05	...	...
...	...	...	...	1	·08	175	14·36	...	...
...	...	...	...	30	2·50	187	15·59	...	...
...	...	...	...	...	...	73	6·70	...	...
...	...	...	...	1	·03	150	4·99	...	...
...	...	...	...	1	·07	145	10·48	...	...
...	...	...	...	54	1·26	164	3·84	...	...
...	...	...	...	39	2·80	321	23·07	...	...
...	...	...	...	67	2·83	134	5·65	2	·08
...	...	...	...	2	·20	83	8·32	...	...
...	...	...	...	2	·17	62	5·22	...	...
...	...	...	...	...	...	38	8·37	...	...
...	...	...	...	3	·24	...	...	...	...
...	...	...	...	5	·23	121	5·47	...	...
...	...	...	...	10	·82	88	7·22	...	...
...	...	...	...	5	·28	58	3·30	...	...
...	...	...	...	13	1·25	17	1·64	1	·10
...	...	...	...	12	·42	42	1·47	...	...
...	...	...	...	33	1·27	27	1·04	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	34	6·47	...	...
...	...	...	...	16	1·86	1	·12	...	...
...	...	...	...	2	·28	8	1·11	...	...

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS.						
	East Khandesh District.						
1	Jalgaon	6	·25	50	2·11	56	2·36
2	Bhusáwal	13	·52	10	·40	28	1·12
3	Chopda	1	·05	6	·85	16	·94
4	Dharangaon	...	...	44	2·97	12	·81
5	Parola	...	...	9	·75	72	5·96
6	Amálner	...	...	9	·53	43	2·52
7	Erandol	...	...	58	4·64	6	·48
8	Nasirabad	...	...	...	...	74	6·07
9	Chálisgaon	5	·42	50	4·17	9	·75
10	Yawal	...	...	7	·64	38	3·49
	West Khandesh District.						
11	Dhulia	98	3·26	74	2·46	81	2·69
12	Nandurbar	2	·14	5	·36	64	4·62
	Nasik District.						
13	Násik	191	4·47	135	2·98	127	2·97
14	Yeola	19	1·37	17	1·22	88	6·32
15	Málegaon	7	·29	29	1·22	72	3·04
16	Igatpuri	5	·50	7	·70	21	2·10
17	Manmad	4	·34	7	·59	35	2·95
18	Trimbak	1	·22	7	1·54	18	3·97
19	Deolali Cantonment	20	1·66	...	...	11	·87
	Thana District.						
20	Thána	57	2·58	66	2·98	40	1·81
21	Bhiwandi	26	2·13	58	4·76	28	2·30
22	Kalyán	33	1·88	42	2·39	55	3·13
23	Bassein	26	2·51	14	1·35	...	...
	Bombay Suburban District.						
24	Bandra	60	2·09	16	·56	28	·97
25	Kurla	19	·73	...	...	172	6·60
26	Santa Cruz Cantonment	...	...	...	...	...	...
	Kolaba District.						
27	Alibág	2	·38	16	3·05	3	·57
28	Panvel	17	1·97	33	3·83	15	1·74
29	Mahád	7	·97	11	1·54	7	·97

No. VI *(a)*—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year:			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
7	·29	39	1·65	5	106	101	207	295·99	1
4	·16	13	·52	1	84	51	135	197·65	2
3	·17	9	·53	...	23	24	47	114·63	3
2	·13	26	1·75	...	64	87	151	287·62	4
...	...	9	·75	...	42	30	72	146·35	5
3	·17	3	·17	...	58	62	120	220·56	6
24	1·92	10	·90	...	48	40	88	165·41	7
4	·33	6	·49	...	77	57	134	225·21	8
2	·17	16	1·33	...	70	71	141	308·54	9
1	0·9	9	·82	...	15	17	32	145·46	10
2	·07	32	1·06	1	128	113	241	186·25	11
...	...	12	·87	...	52	38	90	160·75	12
37	·63	59	1·38	28	190	175	365	334·86	13
3	·22	14	1·01	13	89	64	153	460·84	14
12	·51	40	1·69	25	93	65	158	232·17	15
1	·10	5	·50	6	22	16	38	170·40	16
...	...	11	·93	3	29	24	53	203·85	17
...	...	3	·66	6	23	17	40	238·92	18
...	...	13	1·03	1	9	6	15	833·33	19
1	·04	37	1·67	...	39	22	61	179·41	20
1	·08	34	2·79	...	40	33	73	168·20	21
2	·12	11	·62	2	41	30	71	154·01	22
8	·77	12	1·16	1	7	6	13	65·99	23
21	·73	22	·77	2	62	43	105	146·44	24
37	2·19	2	·07	11	72	87	159	260·23	25
1	·21	...	...	...	3	1	4	571·42	26
...	...	4	·76	1	11	7	18	128·57	27
3	·35	9	1·04	...	9	8	17	93·90	28
16	·22	...	...	1	18	9	27	243·24	29

1	2	3	4		5	
No.	Districts and Towns.	Population according to Census of 1921.	Enteric Fever.		Measles.	
			Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*					
	Kolaba District—contd.					
30	Uran	8,135	1	·12	...	...
31	City of Bombay	1,148,815	161	·14	113	·10
	Ahmednagar District.					
32	Ahmednagar	33,138	14	·42	39	1·18
33	Sangamner	12,737	...	...	...	...
34	Ahmednagar Cantonment	10,997	1	·09	2	·18
	Poona District.					
35	Poona City	133,122	57	·43	147	1·10
36	Poona Suburban	13,971	1	·07	1	·07
37	Baramati	11,905	1	·06	8	·67
38	Khed	7,013	...	...	...	...
39	Lonávla	10,471	...	...	10	·96
40	Junnar	7,376	...	...	...	...
41	Poona Cantonment	25,498	3	·12	1	·04
42	Kirkee do.	7,991	...	...	...	...
	Sholapur District.					
43	Sholápur	119,347	2	·02	165	1·38
44	Bársi	22,074	...	...	15	·68
45	Pandharpur	25,210	2	·08	40	1·59
	Satara District.					
46	Sátára	22,454	2	·09	26	1·16
47	Wái	10,208	5	·49	11	1·08
48	Karád	11,255	3	·26	4	·36
49	Ashta	9,016	...	...	...	...
50	Islámpur	7,915	1	·13	...	...
	Ratnagiri District.					
51	Ratnágiri	18,286	2	·11	3	·16
52	Vengurla	19,126	9	·47	1	·05
53	Málwan	22,213	...	...	1	·89
54	Chiplun	11,005	5	·45	...	...
	Belgaum District.					
55	Belgaum	36,214	10	·28	39	1·08
56	Gokák	9,989	...	...	26	2·60
57	Athni	13,538	...	...	5	·37
58	Nipáni	11,878	5	·42	23	1·94
59	Belgaum Cantonment	6,880	...	...	...	...

No. VI (*a*)—*contd.*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	...	...	50	6·15	...	...
...	...	...	...	211	·18	1,740	1·51	62	·05
...	...	...	...	11	·33	60	1·81	1	·03
...	...	...	...	23	1·81	30	2·35	...	...
...	...	...	...	3	·27	72	6·55	...	...
...	...	...	...	182	1·37	580	4·36	1	·00
...	...	...	...	20	1·43	65	4·66	...	...
...	...	...	...	1	·08	141	11·85	...	...
...	...	...	...	...	...	12	1·74	...	...
...	...	...	...	28	2·67	85	8·12	...	...
...	...	...	...	17	2·30	25	3·39	...	...
...	...	...	...	3	·12	37	1·45	...	...
...	...	...	...	...	...	20	2·50	...	...
...	...	...	...	...	...	2,144	17·97	...	...
...	...	...	...	1	·04	368	16·67	...	...
...	...	...	...	15	·59	402	15·95	...	...
...	...	...	...	1	·04	127	5·66	...	...
...	...	...	...	2	·20	38	3·27	...	...
...	...	...	...	1	·09	52	4·62	...	...
...	...	...	...	...	...	68	7·54	...	...
...	...	...	...	...	...	45	5·68	...	...
...	...	...	...	...	...	81	4·43	...	...
...	...	...	...	4	·21	87	4·55	...	...
...	...	...	...	...	...	89	4·00	...	...
...	...	...	...	...	...	105	9·54	...	...
...	...	...	...	19	·52	191	5·27	...	...
...	...	...	...	6	·60	59	5·92	...	...
...	...	...	...	9	·66	90	6·65	...	...
...	...	...	...	4	·34	77	6·48	...	...
...	...	...	...	8	1·16	34	4·94	2	·29

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*						
	Kolaba District—contd.						
30	Uran	...	...	8	·98	1	·12
31	City of Bombay	7,493	6·53	1,448	1·26	2,027	1·76
	Ahmednagar District.						
32	Ahmednagar	58	1·75	72	2·17	98	2·96
33	Sangamner	...	...	11	·86	48	3·77
34	Ahmednagar Cantonment	17	1·55	14	1·28	45	4·09
	Poona District.						
35	Poona City	991	7·45	486	3·65	310	13·43
36	Poona Suburban	3	·21	6	·43	29	2·72
37	Baramati	12	1·00	29	2·44	17	1·43
38	Khed	1	·14	...	...	39	5·56
39	Lonávla	24	2·29	10	·96	20	1·91
40	Junnar	1	·14	11	1·49	42	5·69
41	Poona Cantonment	71	2·78	45	1·77	30	1·18
42	Kirkee do.	25	3·13	21	2·63	17	2·12
	Sholapur District.						
43	Sholapur	61	·51	174	1·46	323	2·71
44	Bársi	4	·18	14	·64	54	2·45
45	Pandharpur	38	1·51	53	2·10	183	7·26
	Satara District.						
46	Sátára	20	·89	39	1·74	62	2·76
47	Wái	5	·49	16	1·57	17	1·67
48	Karád	3	·27	19	1·69	13	1·15
49	Ashta	3	·34	5	·55	9	1·00
50	Islámpur	...	...	13	1·64	39	4·93
	Ratnagiri District.						
51	Ratnágiri	5	·27	43	2·35	12	·66
52	Vengurla	17	·89	27	1·41	27	1·41
53	Málwan	7	·32	28	1·26	29	·31
54	Chiplun	2	·18	31	2·82	10	·91
	Belgaum District.						
55	Belgaum	46	1·27	127	3·51	78	2·15
56	Gokák	1	·10	26	2·60	15	1·50
57	Athni	2	·15	3	·22	64	4·78
58	Nipáni	1	·08	19	1·60	49	4·13
59	Belgaum Cantonment	...	...	4	·58	4	·58

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
...	...	4	·49	...	8	10	18	117·65	30
350	·30	851	·74	194	3,874	3,314	7,188	300·66	31
...	...	51	1·54	22	90	81	171	136·15	32
...	...	9	·71	3	28	24	52	169·93	33
8	·73	8	·73	2	35	26	61	197·41	34
8	·06	274	2·12	39	906	733	1,639	342·90	35
...	...	13	·98	1	13	21	34	566·67	36
1	·08	24	2·02	2	45	44	89	209·41	37
...	...	...	...	2	2	5	7	38·46	38
...	...	4	·38	1	42	28	70	333·75	39
...	...	5	·68	2	32	10	32	124·03	40
8	·31	16	·68	2	29	28	57	372·55	41
1	·13	15	1·87	...	28	22	50	347·22	42
2	·02	189	1·58	56	677	525	1,202	228·73	43
...	...	26	1·18	2	140	94	234	389·62	44
5	·20	72	2·86	27	265	217	482	497·93	45
...	...	22	·98	12	89	53	142	340·53	46
2	·20	8	·78	4	16	13	29	126·64	47
...	...	22	1·95	7	12	16	28	123·11	48
1	·11	21	2·33	...	23	14	36	165·89	49
...	...	24	3·03	...	23	11	34	170·85	50
...	...	...	...	3	14	19	33	63·83	51
5	·26	9	·47	6	33	28	61	94·28	52
8	·36	5	·23	2	30	24	54	90·46	53
6	·55	4	·36	2	15	10	25	75·53	54
5	·14	68	1·87	3	93	67	160	149·25	55
2	·20	32	3·20	4	33	19	52	148·57	56
4	·29	5	·37	1	22	16	38	94·53	57
1	·08	18	1·52	2	30	16	46	121·05	58
...	...	2	·29	2	8	7	15	234·37	59

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*					
	Dharwar District.					
60	Dhárwár	34,327	33	·96	10	·29
61	Hubli	69,140	40	·58	18	·26
62	Gadag-Bettigeri	41,158	11	·27	38	·92
63	Ránebennur	13,930	4	·29	33	2·38
64	Nawalgund	7,089	...	...	...	...
	Bijapur District.					
65	Bijápur	32,471	19	·59	24	·74
66	Bágalkot	19,471	5	·26	1	·05
67	Guledgud	14,760	5	·34	...	...
68	Ilkal	11,856	10	·84	7	·59
	Kanara District.					
69	Kárwár	14,463	6	·41	...	...
70	Kumta	14,291	1	·07	...	...
71	Gokarn	8,307	21	2·53	...	...
72	Honáwar	7,035	...	...	...	...
73	Bhatkal	7,134	1	·14	...	...
	Surat District.					
74	Surat	117,424	28	·24	133	1·13
75	Bulsar	19,681	3	·15	9	·46
76	Ránder	10,547	...	...	1	·10
	Broach District.					
77	Broach	42,626	...	...	17	·40
78	Jambusar	10,217	...	...	6	·59
79	Ankleshwar	11,756	...	...	7	·59
	Kaira District.					
80	Kaira	8,277	...	...	1	·12
81	Mehmedabad	6,236	...	...	50	8·02
82	Nadiád	31,919	...	...	75	2·35
83	Borsad	12,113	...	...	32	2·64
84	Anand	11,024	...	...	...	...
85	Umreth	14,024	...	...	...	...
86	Dákore	7,990	1	·13	2	·25
87	Kapadvanj	14,794	...	...	15	1·01

No. VI (*a*)—*contd.*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	21	·61	202	5·88	...	...
...	...	...	...	43	·62	230	3·32	1	·01
...	...	...	...	9	·21	428	10·40	9	·21
...	...	...	...	4	·29	38	2·73	...	...
...	...	...	...	1	·14	21	2·96	...	...
...	...	...	...	101	3·11	75	2·31	...	...
...	...	...	...	10	·51	176	9·03	...	...
...	...	...	...	...	...	102	6·91	...	...
...	...	...	...	36	3·04	60	5·06	...	...
...	...	...	...	32	2·21	1	·07	...	...
...	...	...	...	2	·14	88	6·16	...	...
...	...	...	...	3	·36	44	5·30	...	...
..	...	...	...	1	·14	41	5·83	...	...
...	...	...	...	...	...	50	7·01	...	...
...	...	...	...	161	1·37	70	·60	1	·01
...	..	...	..	4	·20	16	·81	1	·05
...	...	...	...	...	...	107	10·14	...	...
...	...	...	...	1	·02	345	8·09	...	...
...	...	...	...	136	13·31	1	·10	...	...
...	...	...	...	...	...	233	19·82	...	...
...	..	...	..	...	...	71	8·58	...	...
...	...	...	...	...	...	137	21·97	...	...
...	...	...	...	...	...	653	20·46	...	...
...	...	...	...	...	...	264	21·79	...	..
...	...	...	...	...	...	224	20·32	...	.
...	...	...	...	142	10·13	26	1·85	...	...
...	...	...	...	7	·87	132	16·52	...	...
...	...	...	...	...	...	180	12·17	...	..

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1	2			11		12		18	
				Pneumonia.		Phthisis.		Other Respiratory diseases.	
No.	Districts and Towns.			Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*								
	Dharwar District.								
60	Dhárwár	...	...	15	·44	45	1·31	136	3·96
61	Hubli	...	...	20	·29	168	2·40	107	1·55
62	Gadag-Bettigeri	...	...	23	·56	78	1·90	232	5·64
63	Ranebennur	...	...	...	...	35	2·51	55	3·95
64	Nawalgund	...	...	...	...	19	2·67	18	2·54
	Bijapur District.								
65	Bijápur	...	...	15	·46	47	1·45	86	2·65
66	Bágalkot	...	...	1	·05	33	1·69	60	3·08
67	Guledgud	...	...	1	·07	41	2·77	51	3·46
68	Ilkal	...	...	...	...	42	3·54	49	4·13
	Kanara District.								
69	Kárwar	...	...	...	...	15	1·04	6	·41
70	Kumta	..	..	...	...	6	·42	26	1·82
71	Gokarn	...	...	9	1·08	15	1·81	...	...
72	Honáwar	...	...	...	...	2	·26	5	·72
73	Bhatkal	...	...	...	...	6	·84	9	1·26
	Surat District.								
74	Surat	...	...	909	7·74	316	2·69	460	3·92
75	Bulsar	...	...	147	7·47	17	·86	28	1·42
76	Rándor	...	...	9	·85	59	5·59	35	3·32
	Broach District.								
77	Broach	...	...	31	·73	8	·19	227	5·32
78	Jambusar	...	...	9	·88	13	1·27	93	9·10
79	Ankleshwar	..	...	11	·94	7	·59	45	3·83
	Kaira District.								
80	Kaira	...	...	...	...	17	2·05	77	9·30
81	Mehmedabad	...	...	10	1·60	11	1·77	29	4·65
82	Nadiád	...	...	151	4·73	64	2·01	68	2·13
83	Borsad	...	...	2	·17	9	·74	30	2·48
84	Anand	...	...	10	·91	10	·91	15	1·36
85	Umreth	...	...	...	...	8	·57	239	17·04
86	Dakore	..	...	3	·38	18	2·25	47	5·88
87	Kapadvanj	...	...	26	1·76	50	3·38	28	1·89

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male	Female.	Total		
5	·15	25	·76	7	62	67	129	104·20	60
15	·33	27	·39	11	102	91	193	90·70	61
·14	·34	45	1·09	4	162	138	300	193·05	62
3	·22	10	·72	4	63	47	110	184·87	63
...	...	12	1·69	...	9	13	22	121·55	64
2	·06	39	1·20	2	85	69	154	143·20	65
...	...	41	2·11	7	84	71	155	205·57	66
...	...	3	·20	6	73	91	164	242·96	67
...	..	...	...	...	69	51	120	248·45	68
9	·62	26	1·66	4	8	10	18	47·37	69
3	·21	16	1·12	2	30	15	45	113·92	70
1	·12	16	1·93	5	14	9	23	101·32	71
...	...	4	·57	...	10	12	22	83·33	72
1	·14	10	1·40	4	9	11	20	69·44	73
75	·64	370	3·15	43	854	790	1,644	364·12	74
9	·46	9	·46	3	50	57	107	163·36	75
4	·38	1	·10	3	32	31	63	172·13	76
8	·19	11	·26	28	144	100	244	133·41	77
...	...	7	·69	...	42	44	86	181·05	78
...	...	...	...	1	47	41	88	220·55	79
3	·36	7	·85	...	25	27	52	177·47	80
3	·48	8	1·28	...	57	42	99	328·90	81
2	·06	10	·31	18	219	209	428	369·60	82
27	2·23	3	·25	...	105	66	171	260·67	83
1	·09	2	·18	...	25	31	56	165·68	84
5	·36	...	...	...	73	58	131	217·97	85
2	·25	11	1·38	4	43	33	76	277·37	86
1	·07	10	·68	...	56	50	106	185·31	87

ANNUAL FORM

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*					
	Panch Mahals District.					
88	Godhra	26,969	...	...	33	1·22
89	Dohad	16,071	...	...	11	·69
	Ahmedabad District.					
90	Ahmedabad	270,599	1	...	878	3·24
91	Dhandhuka	8,056	...	...	23	2·85
92	Viramgaon	26,252	...	...	49	1·87
93	Dholka	12,513	...	...	12	·96
94	Ahmedabad Cantonment	1,745	...	...	1	·57
	Karachi District.					
95	Karáchi	199,014	26	·13	912	4·56
96	Tatta	8,470	...	...	...	...
97	Kotri	9,072	2	·22	6	·66
98	Karáchi Cantonment	6,525	1	·15	...	...
	Hyderabad District.					
99	Hyderabad	72,625	23	·32	95	1·32
100	Halla	5,757	...	...	1	·17
101	Matiari	4,638	...	...	...	...
102	Hyderabad Cantonment	3,760	...	...	...	...
	Thar and Parkar District.					
103	Umarkot	4,199	...	...	...	...
104	Mirpurkhas	5,765	...	...	1	·17
	Nawabshah District.					
105	Nawábsháh	2,771	...	...	...	...
106	Tando Adam	12,966	10	·77	32	2·47
	Larkana District.					
107	Lárkána	17,700	36	2·32	46	2·59
108	Kambar	7,613	11	1·44	18	2·37
109	Ratodero	5,565	...	...	14	2·52
110	Sehwan	4,423	2	·46	12	2·71

No. VI (*a*)—*contd.*

6 Relapsing Fever.		7 Kala Azar.		8 Malaria.		9 Other Fevers.		10 Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	...	...	480	17·80	...	...
...	...	...	...	...	...	262	16·30	...	...
...	...	...	...	4	·01	4,432	16·38	...	...
...	...	...	...	...	...	80	9·93	...	...
...	...	...	...	...	...	382	14·55	...	...
...	...	...	...	...	...	173	13·83	...	...
...	...	...	...	...	...	17	9·74	...	...
...	...	...	...	18	·09	877	4·41	2	·01
...	..	...	...	15	1·77	80	9·45	...	...
...	...	...	...	85	9·36	4	·44	1	·11
...	...	...	...	4	·62	30	4·59	...	...
...	...	...	...	155	2·13	63	·86	...	...
...	...	...	...	5	·87	53	9·20	...	...
...	...	...	...	4	·86	55	11·86	...	...
...	...	...	...	...	...	19	5·05	...	...
..	...	...	...	34	8·10	7	1·66	...	...
...	...	...	...	2	·34	57	9·88	...	...
...	...	...	...	3	1·08	54	19·49	...	...
...	...	...	...	142	10·95	...	...	...	...
...	...	...	...	229	12·94	...	...	...	...
...	...	...	...	...	...	215	28·24	...	...
...	...	...	...	4	·72	262	47·07	...	...
...	...	...	...	38	8·60	...	...	...	...

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory Diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B—TOWNS—*continued.*						
	Panch Mahals District.						
88	Godhra	9	·38	11	·41	33	1·22
89	Dohad	2	12	5	·31	7	·44
	Ahmedabad District.						
90	Ahmedabad	227	·84	930	3·44	2,600	9·61
91	Dhandhuka	...	...	17	2·11	59	7·32
92	Viramgaon	41	1·56	50	1·90	197	7·50
93	Dholka	4	·82	19	1·52	47	3·75
94	Ahmedabad Cantonment	2	1·15	3	1·72	2	1·15
	Karachi District.						
95	Karachi	1,666	8·33	570	2·86	504	2·54
96	Tatta	20	2·36	12	1·42	27	3·19
97	Kotri	40	4·41	11	1·21	4	·44
98	Karachi Cantonment	18	2·76	...	...	...	...
	Hyderabad District.						
99	Hyderabad	802	11·04	199	2·74	94	1·29
100	Halla	5	·87	5	·87	...	...
101	Matiari	12	2·59	3	·64	1	·22
102	Hyderabad Cantonment	4	1·06	...	...	...	...
	Thar and Parkar District.						
103	Umarkot	28	6·67	5	1·20	4	·96
104	Mirpurkhas	18	3·12	8	1·40	1	·17
	Nawabshah District.						
105	Nawábsháh	1	·36	1	·36	...	...
106	Tando Adam	56	4·32	8	·62	19	1·46
	Larkana District.						
107	Lárkána	31	1·75	17	·96	34	1·92
108	Kambar	20	2·63	20	2·63	1	0·13
109	Ratodero	...	...	...	...	...	...
110	Sehwan	14	3·17	7	1·58	...	...

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
...	...	5	·19	2	109	106	215	208·74	88
...	...	4	·25	6	42	40	82	158·00	89
93	·34	310	1·15	250	2,219	2,001	4,220	331·65	90
1	·12	4	·50	...	34	26	60	150·38	91
6	·23	7	·27	21	93	128	221	319·36	92
...	...	3	·24	...	68	55	123	186·36	93
2	1·15	...	...	...	5	2	7	269·23	94
114	·56	377	1·89	130	1,427	1,137	2,564	230·55	95
4	·47	4	·47	8	25	27	52	290·50	96
1	·11	14	1·55	7	17	26	43	333·33	97
1	·15	4	·62	2	14	12	26	105·07	98
50	·68	71	·99	60	378	371	749	248·84	99
...	...	...	...	4	14	11	25	178·57	100
...	...	1	·22	3	12	6	18	157·89	101
...	...	...	...	...	2	4	6	250·00	102
...	...	1	·24	2	11	13	24	190·48	103
2	·34	2	·34	4	5	7	12	129·03	104
...	...	...	...	3	12	1	13	180·56	105
5	·38	2	·16	16	39	35	74	182·27	106
13	·74	12	·67	59	117	127	244	340·78	107
...	...	2	·26	10	37	31	68	309·09	108
1	·18	...	...	5	31	34	65	335·05	109
...	...	3	·69	8	17	15	32	457·14	110

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B—TOWNS—*concld.*					
	Sukkur District.					
111	Sukkur	42,046	13	·30	48	1·14
112	Shikárpur	55,347	95	1·71	214	3·86
113	Rohri	11,378	1	·08	...	...
114	Garhi Yasin	6,375	...	...	...	...
	Upper Sind Frontier District.					
115	Jacobabad	10,578	...	...	...	...
	Total of Towns ...	3,743,785	730	·19	3,917	1·05
	Total for the Presidency ...	19,165,614	2,869	·15	8,858	·46

No. VI *(a)—concld.*

6 Relapsing Fever.		7 Kala Azar.		8 Malaria.		9 Other Fevers.		10 Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	...	...	1,107	25·31	...	...
...	...	...	...	513	9·27	453	8·19	...	...
...	...	...	...	255	22·43	...	...	...	...
...	...	...	...	29	4·55	316	49·57	...	...
...	...	...	...	...	...	203	19·19	...	...
...	...	...	...	3,123	·83	23,722	6·34	85	·02
...	...	...	...	30,851	1·61	203,574	10·62	280	·01

ANNUAL FORM

1	2	11		12		13	
		Pneumonia		Phthisis.		Other Respiratory Diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*concluded.*						
	Sukkur District.						
111	Sukkur	65	1·54	11	·26	30	·72
112	Shikárpur	65	1·17	46	·83	100	1·81
113	Rohri	30	2·61	18	1·61	10	·87
114	Gárhi Yasin	...	...	...	...	2	·31
	Upper Sind Frontier District.						
115	Jacobabad	9	·85	...	...	...	...
	Total of Towns ...	14,126	3·78	6,703	1·80	10,967	2·93
	Total for the Presidency ...	22,163	1·15	22,393	1·17	55,341	2·89

No. VI (a)—*concld.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
8	·19	21	·50	43	221	172	393	298·13	111
19	·34	43	·78	82	381	386	767	456·28	112
...	...	27	2·37	26	67	49	116	325·84	113
...	...	...	...	3	42	37	79	413·61	114
...	...	1	·09	1	25	24	49	256·30	115
1,135	·30	3,901	1·04	1,421	16,184	13,956	30,140	1,257·69	
3,967	·21	21,141	1·10	4,987	74,793	63,809	138,602	188·95	

ANNUAL FORM No. VII.—DEATHS *registered from during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from cholera were reported.	Number in each District.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	22	1,478	224	...	...	...	...	...	...
2	West Khandesh ...	10	8	1,242	68	...	...	...	...	...	...
3	Nasik	19	11	1,667	62	...	...	...	...	12	2
4	Thana	19	4	1,546	5	2	...	...	...	1	...
5	Bombay Suburban ...	5	1	86	1	...	...	...	3	...	...
6	Kolaba	13	...	1,482	...	...	...	...	...	...	...
7	City of Bombay ...	1	1	1	1	...	...	2	1	1	2
	Central Registration District.										
8	Ahmednagar ...	15	5	1,346	9	...	...	...	...	...	...
9	Poona	20	1	1,157	1	...	...	...	...	...	...
10	Sholapur	10	3	719	4	...	...	...	...	...	...
11	Satara	18	5	1,341	6	...	...	...	...	1	1
12	Ratnagiri	15	1	1,305	1	...	...	...	...	...	...
	Southern Registration District.										
13	Belgaum	15	2	1,069	3	...	...	...	1	1	2
14	Dharwar	18	4	1,277	4	...	2	2	...	..	...
15	Bijapur	13	2	1,128	2	...	1	...	...	...	...
16	Kanara	16	2	1,264	6	11	...	...	...	...	...
	Gujarat Registration District.										
17	Surat	12	1	782	1	...	...	...	...	...	...
18	Broach	9	...	404	...	...	...	...	...	...	...
19	Kaira	15	...	579	...	...	...	...	...	...	...
20	Panch Mahals ...	7	1	668	1	...	...	...	...	...	...
21	Ahmedabad ...	13	2	871	2	...	...	...	...	1	...
	Sind Registration District.										
22	Karachi	16	13	793	188	...	...	...	...	...	...
23	Hyderabad ...	11	10	862	30	...	...	...	...	...	...
24	Thar and Parkar ...	13	3	904	3	...	...	...	...	...	..
25	Nawabshah ...	9	6	731	33	...	...	...	...	...	...
26	Larkana	15	15	763	498	...	...	...	...	...	...
27	Sukkur	12	11	671	59	...	...	...	...	...	2
28	Upper Sind Frontier	6	6	410	23	...	...	...	...	3	2
	Total for the Presidency ...	368	140	26,546	1,230	13	3	4	5	20	11

CHOLERA *in the* DISTRICT *of the* BOMBAY PRESIDENCY *of the year 1929.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	6 Total. Female.	6 Total. Total.	7 Ratio of Deaths per 1,000 of Population. Male.	7 Ratio of Deaths per 1,000 of Population. Female.	7 Ratio of Deaths per 1,000 of Population. Total	8 Mean ratio per 1,000 of previous five years.	9 No.
308	1,351	134	40	37	14	903	981	1,884	1·65	1·85	1·75	·72	1
19	127	89	29	2	20	146	140	286	·47	·46	·47	·21	2
24	151	79	34	42	52	176	220	396	·43	·54	·48	·39	3
...	2	2	...	...	...	5	2	7	·01	·00	·01	·06	4
...	...	...	...	...	...	2	1	3	·02	·02	·02	·03	5
...	...	...	...	...	...	...	...	...	...	...	...	·18	6
1	...	1	...	...	...	6	2	8	·01	·01	·01	·03	7
1	1	...	7	23	...	19	13	32	·05	·03	·04	·58	8
...	1	...	...	...	...	1	...	1	·00	...	·00	·47	9
1	1	...	1	1	1	5	...	5	·01	...	·01	1·33	10
2	...	1	1	...	...	3	3	6	·01	·01	·01	1·20	11
1	...	...	...	...	...	1	...		·00	...	·01	·01	12
1	...	...	...	...	...	3	2	5	·01	·00	·01	1·67	13
...	...	...	...	...	...	2	2	4	·00	·00	·00	1·01	14
...	...	1	...	...	...	1	1	2	·00	·00	·00	1·04	15
...	2	...	...	...	...	6	7	13	·03	·04	·03	·11	16
1	...	...	...	...	...	1	...	1	·00	...	·00	·02	17
...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	14	...	...	...	...	7	7	14	·04	·04	·04	...	20
...	3	1	...	...	...	3	2	5	·01	·00	·01	·03	21
1	276	548	402	131	...	762	591	1,353	2·52	2·59	2·55	·04	22
...	123	68	38	...	...	128	121	249	·40	·48	·44	·02	23
...	...	3	...	...	...	2	1	3	·01	·01	·01	·00	24
...	33	176	26	10	...	124	121	245	·52	·65	·58	·05	25
470	2,969	265	1	...	...	2,060	1,647	3,707	6·22	6·17	6·20	·10	26
151	374	106	81	1	...	368	300	668	1·31	1·32	1·31	·04	27
24	107	49	6	...	...	100	86	186	·72	·82	·77	·02	28
1,005	5,535	1,538	616	247	87	4,834	4,250	9,084	·48	·47	·47	·43	

ANNUAL FORM NO. VIII.—DEATHS *registered from during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from Small-pox were reported.	Number in each District.	Number from which deaths from Small-pox were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	22	1,478	419	54	69	188	280	338	179
2	West Khandesh ...	10	9	1,242	311	103	138	233	212	188	118
3	Nasik	19	17	1,667	174	72	125	140	103	72	38
4	Thana	19	14	1,546	126	12	53	50	80	66	43
5	Bombay Suburban ...	5	4	86	14	8	17	7	9	6	3
6	Kolaba	13	12	1,482	119	6	8	27	45	65	47
7	City of Bombay ...	1	1	1	1	74	146	251	196	160	110
	Central Registration District.										
8	Ahmednagar ...	15	12	1,346	97	45	51	42	43	20	15
9	Poona	20	16	1,157	118	50	81	45	65	47	28
10	Sholapur	10	10	719	56	11	31	19	16	12	6
11	Satara	18	18	1,341	56	9	15	18	22	17	13
12	Ratnagiri	15	11	1,305	129	31	44	63	59	80	41
	Southern Registration District.										
13	Belgaum	15	11	1,069	78	31	28	26	32	28	15
14	Dharwar	18	14	1,271	132	44	74	72	54	31	49
15	Bijapur	13	12	1,128	76	13	26	24	18	14	6
16	Kanara	16	6	1,264	9	...	...	1	6	4	1
	Gujarat Registration District.										
17	Surat	12	10	782	25	1	4	22	40	40	14
18	Broach	9	6	404	8	...	1	...	3	6	1
19	Kaira	15	11	579	22	...	...	...	3	21	...
20	Panch Mahals ...	7	5	668	19	...	1	6	8	6	8
21	Ahmedabad ...	13	12	871	84	23	42	42	51	74	44
	Sind Registration District.										
22	Karachi	16	9	793	13	4	27	86	92	94	84
23	Hyderabad ...	11	3	862	5	...	2	7	1	5	10
24	Thar and Parkar ...	13	3	904	4	...	...	...	...	1	...
25	Nawabshah ...	9	4	731	35	13	9	13	16	16	6
26	Larkana	15	11	763	35	11	2	20	2	17	15
27	Sukkur	12	5	671	19	3	13	10	14	9	11
28	Upper Sind Frontier.	6	2	410	2	...	...	...	...	1	...
	Total for the Presidency ...	368	266	26,546	2,186	618	957	1,402	1,471	1,489	855

N.B.—Small-pox should not include Measles, Chicken-pox, etc.

SMALL-POX *in the* DISTRICT *of the* BOMBAY PRESIDENCY *of the year 1929.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	Female.	Total.	7 Number of these Deaths among Children. Under 1 year.	Under 10 years.	8 Total ratio of Deaths per 1,000 of Population. Male.	Female.	Total.	9 Mean ratio per 1,000 for previous five years.	10 No.
163	81	61	58	122	439	1,007	1,020	2,027	772	1,127	1·84	1·92	1·88	·57	1
91	72	26	27	23	142	696	677	1,373	450	877	2·25	2·23	2·24	·62	2
43	17	13	13	36	90	378	384	762	270	419	·90	·94	·92	·52	3
40	30	18	33	39	50	259	255	514	136	285	·67	·69	·68	·25	4
3	...	4	9	5	1	36	36	72	23	33	·41	·56	·48	·21	5
52	38	20	18	29	40	207	189	396	97	248	·74	·67	·70	·36	6
62	39	20	16	14	38	599	527	1,126	240	493	·80	1·33	·98	·65	7
26	5	2	2	12	20	141	142	283	80	167	·39	·39	·39	·26	8
32	16	12	13	55	214	304	305	609	193	331	·61	·63	·62	·37	9
2	...	2	1	4	19	64	59	123	48	58	·17	·16	·17	·37	10
12	3	1	2	9	38	83	71	154	47	69	·16	·14	·15	·18	11
23	21	13	7	18	26	221	205	426	61	161	·42	·32	·37	·33	12
21	14	4	3	3	15	114	106	220	53	79	·24	·23	·23	·22	13
48	23	11	8	20	18	229	223	452	117	193	·43	·44	·44	·12	14
13	9	7	6	5	17	79	79	158	60	59	·19	·20	·20	·09	15
...	4	3	1	...	2	10	12	22	3	4	·05	·06	·05	·33	16
2	2	10	10	21	116	143	139	282	80	125	·42	·41	·42	·59	17
...	...	...	...	...	5	11	5	16	5	9	·07	·03	·05	·30	18
...	...	...	...	16	184	111	113	224	83	137	·29	·34	·31	·09	19
13	3	1	5	6	10	35	32	67	20	36	·18	·18	·18	·08	20
46	19	18	18	35	170	286	296	582	148	330	·60	·71	·66	·29	21
18	14	11	4	1	5	209	181	390	120	147	·69	·79	·73	·29	22
2	2	...	...	...	2	12	19	31	4	21	·03	·07	·05	·26	23
...	...	...	...	9	5	12	3	15	4	9	·05	·02	·04	·24	24
5	...	1	1	...	...	42	38	80	15	54	·18	·20	·19	·23	25
15	11	6	1	10	13	64	59	123	25	86	·19	·22	·21	·23	26
21	4	9	2	5	2	58	45	103	19	35	·21	·21	·21	·19	27
...	...	4	...	...	...	3	2	5	3	1	·03	·02	·03	·07	28
753	427	277	258	497	1,681	5,413	5,222	10,635	3,176	5,593	·54	·57	·56	·32	

ANNUAL FORM NO. IX.—DEATHS *registered from during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	District.	Number in each District.	Number from which deaths from fevers were reported.	Number in each District.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	1,431	1,067	840	1,418	2,647	2,401	1,211
2	West Khandesh ...	10	10	1,242	1,096	765	524	774	1,201	1,114	606
3	Nasik	19	19	1,667	1,531	1,280	934	981	1,455	1,388	725
4	Thana	19	19	1,546	1,316	830	716	768	781	596	415
5	Bombay Suburban ...	5	4	86	50	51	41	50	57	33	28
6	Kolaba	13	13	1,482	1,153	631	390	401	436	397	282
7	City of Bombay ...	1	1	1	1	195	164	196	226	207	180
	Central Registration District.										
8	Ahmednagar ...	15	15	1,346	995	482	313	409	666	743	501
9	Poona	20	20	1,157	845	935	679	736	1,060	1,362	1,014
10	Sholapur	10	10	719	677	806	625	848	855	1,305	767
11	Satara	18	18	1,341	1,234	907	732	790	934	1,553	1,231
12	Ratnagiri	15	15	1,305	1,213	882	750	737	774	765	618
	Southern Registration District.										
13	Belgaum ...	15	15	1,059	986	578	493	887	1,201	1,106	739
14	Dharwar ...	18	18	1,277	1,127	1,011	804	1,418	1,254	887	629
15	Bijapur ...	13	13	1,128	1,058	737	706	945	981	1,039	683
16	Kanara ...	16	16	1,264	925	547	460	455	623	292	267
	Gujarat Registration District.										
17	Surat	12	12	782	663	558	468	622	604	581	421
18	Broach	9	9	404	385	409	552	591	425	346	238
19	Kaira	15	15	579	559	514	574	1,251	1,042	715	512
20	Panch Mahals ...	7	7	568	591	502	389	563	509	392	325
21	Ahmedabad ...	13	13	871	840	1,297	1,429	2,166	2,281	1,631	949
	Sind Registration District.										
22	Karachi	16	16	793	793	347	736	553	354	421	267
23	Hydorabad ...	11	11	862	862	685	583	632	448	393	367
24	Thar and Parkar ...	13	13	904	904	441	434	437	424	364	259
25	Nawabshah ...	9	9	731	731	771	567	544	588	495	467
26	Larkana	15	15	763	763	1,166	976	944	914	806	752
27	Sukkur	12	12	671	671	653	554	524	701	703	507
28	Upper Sind Frontier.	6	6	410	410	339	233	224	247	199	199
	Total for the Presidency ...	368	367	25,546	23,810	19,886	16,666	20,864	23,688	22,184	15,159

FEVERS *in the* DISTRICT *of the* BOMBAY PRESIDENCY *of the year 1929.*

						6			7			8	9
						Total.			Ratio of Deaths per 1,000 of population.				
July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.	Mean ratio per 1,000 of previous five years.	No.
1,289	2,035	1,579	1,401	1,474	1,422	9,305	9,579	18,884	17·06	18·08	17·56	14·27	1
728	1,092	815	669	797	802	4,827	5,060	9,887	15·59	16·69	16·14	12·46	2
1,022	1,032	845	868	940	959	6,245	6,184	12,429	15·06	15·06	15·06	12·03	3
334	514	445	494	785	772	3,778	3,722	7,500	9·70	10·10	9·91	11·06	4
34	42	41	45	53	51	267	259	526	3·05	4·06	3·48	6·01	5
355	364	388	421	565	615	2,585	2,710	5,246	9·07	9·57	9·33	11·22	6
150	171	187	209	222	180	1,181	1,106	2,287	1·57	2·78	1·99	2·65	7
731	545	440	528	510	425	3,221	3,072	6,293	8·87	8·51	8·69	6·58	8
1,095	1,033	842	887	975	1,111	6,093	5,636	11,729	12·17	11·57	11·88	10·16	9
1,089	1,074	948	1,102	1,075	945	5,741	5,698	11,439	14·98	15·83	15·40	12·08	10
1,250	1,133	967	1,083	1,262	1,347	6,637	6,552	13,189	13·00	12·76	12·88	10·38	11
776	792	698	756	700	794	4,248	4,794	9,042	8·09	7·62	7·83	7·44	12
755	738	620	655	709	700	4,735	4,446	9,181	9·77	9·56	9·67	6·94	13
641	829	772	870	918	1,067	5,494	5,555	11,050	10·40	10·94	10·66	10·22	14
979	949	964	1,111	1,272	1,165	5,626	5,905	11,531	13·89	15·09	14·48	9·97	15
345	280	253	249	323	404	2,191	2,307	4,498	10·74	11·68	11·20	11·06	16
421	476	468	435	398	557	2,909	3,100	6,009	8·62	9·20	8·91	8·59	17
271	349	330	362	320	419	2,267	2,345	4,612	14·30	15·72	14·99	14·03	18
577	655	584	562	556	599	4,146	3,998	8,144	10·92	12·07	11·46	9·35	19
327	432	481	465	448	530	2,812	2,551	5,363	14·54	14·06	14·31	12·85	20
877	970	1,066	932	1,031	1,380	8,193	7,816	16,009	17·30	18·89	18·03	13·79	21
246	306	346	359	580	544	3,044	2,515	5,559	10·06	11·03	10·49	8·54	22
263	309	394	461	654	668	3,301	2,553	5,857	10·43	10·20	10·32	11·07	23
230	252	239	365	435	547	2,484	1 943	4,427	11·24	11·09	11·17	15·24	24
350	232	461	937	1,393	927	4,179	3,553	7,732	17·87	19·22	18·47	14·54	25
834	1,167	1,417	2,037	2,846	2,164	8,603	7,420	16.023	25·97	27·82	26·80	14·46	26
630	778	1,157	3,031	3,324	2,999	7,919	7,642	15,561	28·10	33·54	30·54	14·69	27
172	217	454	1,178	1,714	1,246	3,342	3,080	6,422	24·88	28·98	26·69	12·18	28
16,831	18,769	18,301	22,472	26,279	25,389	1,25,326	1,21,102	2,46,428	12·47	13·28	12·86	10·58	

ANNUAL FORM No. X.—DEATHS *registered from* DYSENTERY *during each month*

1	2	3		4		5					
		Circles of Registration.		Village.							
No.	Districts.	Number in each District.	Number from which deaths from Dysentery and Diarrhœa were reported.	Number in each District.	Number from which deaths from Dysentery and Diarrhœa were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	416	72	54	87	104	113	87
2	West Khandesh ...	10	10	1,242	235	40	20	24	34	24	21
3	Nasik	19	18	1,667	395	84	59	72	103	107	93
4	Thana	19	18	1,546	331	77	66	57	61	48	38
5	Bombay Suburban ...	5	4	86	42	29	19	13	17	26	20
6	Kolaba	13	13	1,482	447	119	70	70	81	76	60
7	City of Bombay ...	1	1	1	1	96	71	86	87	82	77
	Central Registration District.										
8	Ahmednagar ...	15	15	1,346	501	61	102	94	71	84	97
9	Poona	20	20	1,157	450	86	69	105	114	123	111
10	Sholapur	10	10	719	361	93	51	71	40	78	80
11	Satara	18	18	1,341	521	104	64	61	82	145	136
12	Ratnagiri	15	14	1,305	434	156	92	79	84	68	75
	Southern Registration District.										
13	Belgaum	15	15	1,069	601	138	107	178	238	328	287
14	Dharwar	18	18	1,277	293	51	56	53	63	95	80
15	Bijapur	13	12	1,128	460	74	61	63	55	76	98
16	Kanara	16	16	1,264	271	89	80	72	54	41	60
	Gujarat Registration District.										
17	Surat	12	12	782	141	40	53	70	82	101	80
18	Broach	9	8	404	67	18	12	8	9	26	19
19	Kaira	15	15	579	194	29	30	61	74	46	48
20	Panch Mahals ...	7	7	668	65	7	4	10	29	26	8
21	Ahmedabad ...	13	13	871	145	40	43	59	74	66	48
	Sind Registration District.										
22	Karachi	16	14	793	19	47	34	29	50	28	43
23	Hyderabad ...	11	9	862	9	9	7	3	3	10	5
24	Thar and Parkar ...	13	9	904	16	3	2	1	4	...	...
25	Nawabshah ...	9	5	731	9	1	...	...	1	...	...
26	Larkana	15	12	763	19	2	3	...	1	4	1
27	Sukkur	12	10	671	11	10	5	9	4	5	3
28	Upper Sind Frontier.	6	6	410	10	4	2	1	1	1	...
	Total for the Presidency ...	368	345	26,546	6,464	1,578	1,236	1,436	1,620	1,822	1,675

and DIARRHŒA *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1929.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	Female.	Total.	7 Ratio of Deaths per 1,000 of Population. Male.	Female.	Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
182	389	169	126	103	130	817	799	1,616	1·49	1·50	1·50	1·89	1
63	150	109	48	15	29	291	286	577	·94	·94	·94	·92	2
178	166	149	87	76	60	634	600	1,234	1·50	1·50	1·50	1·63	3
79	128	52	59	55	67	439	348	787	1·13	·94	1·04	·65	4
23	55	29	33	31	28	179	144	323	2·04	2·25	2·13	1·70	5
111	181	94	69	65	94	583	507	1,090	2·09	1·79	1·94	1·27	6
118	179	121	112	88	84	689	512	1,201	·92	1·29	1·05	1·89	7
139	184	136	157	111	92	735	593	1,328	2·02	1·64	1·85	2·78	8
178	227	174	151	136	138	883	729	1,612	1·76	1·50	1·62	1·96	9
227	337	181	199	182	135	878	786	1,664	2·29	2·18	2·24	2·36	10
250	314	295	250	226	165	1,079	1,013	2,092	2·12	1·97	2·05	2·18	11
121	157	93	65	71	96	626	531	1,157	1·19	·84	1·01	·95	12
348	336	343	376	341	259	1,619	1,705	3,324	3·34	3·67	3·50	2·89	13
78	102	77	92	107	97	495	456	951	·94	·90	·92	·97	14
132	204	160	235	308	205	826	865	1,691	2·04	2·21	2·12	1·72	15
45	60	60	57	57	67	362	380	742	1·77	1·92	1·85	2·68	16
109	144	87	52	35	48	454	447	901	1·35	1·33	1·34	1·06	17
12	29	14	11	4	6	106	62	168	·67	·42	·54	·40	18
73	122	88	61	52	33	382	335	717	1·01	1·01	1·01	·61	19
8	17	13	13	5	8	76	72	148	·39	·39	·39	·29	20
70	120	81	56	48	47	377	375	752	·80	·90	·85	·46	21
46	71	33	32	40	53	306	250	556	1·01	1·09	1·04	·65	22
9	16	26	26	17	12	88	55	143	·28	·22	·25	·27	23
2	...	...	2	2	6	14	6	20	·06	·03	·05	·12	24
1	3	...	3	8	7	11	13	24	·05	·07	·05	·03	25
1	25	20	4	11	14	48	38	86	·14	·14	·14	·26	26
12	19	15	12	26	44	96	68	164	·34	·30	·32	·28	27
...	8	1	21	...	1	27	13	40	·20	·12	·16	·13	28
2,615	3,783	2,690	2,409	2,220	2,024	13,120	11,988	25,108	1·31	1·32	1·31	1·38	

ANNUAL FORM No. XI.—DEATHS *registered from* RESPIRATORY *each month of*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts	Number in each District.	Number from which deaths from Respiratory Diseases were reported.	Number in each District.	Number from which deaths from Respiratory Diseases were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	989	455	357	453	595	398	204
2	West Khandesh ...	10	10	1,242	686	287	216	249	258	220	156
3	Nasik	19	19	1,667	1,094	571	444	397	582	405	330
4	Thana	19	19	1,545	1,040	426	335	468	427	299	246
5	Bombay Suburban ...	5	4	86	73	73	69	63	75	64	41
6	Kolaba	13	13	1,482	1,001	325	277	302	271	260	205
7	City of Bombay ...	1	1	1	1	972	953	980	970	1,093	816
	Central Registration District.										
8	Ahmednagar ...	15	15	1,346	1,046	491	372	393	507	445	332
9	Poona	20	20	1,157	718	597	455	483	510	563	414
10	Sholapur	10	10	719	505	314	221	216	227	237	201
11	Satara	18	18	1,341	623	261	210	199	198	224	198
12	Ratnagiri	15	15	1,305	1,000	451	304	304	327	319	353
	Southern Registration District.										
13	Belgaum	15	15	1,069	749	325	288	331	443	356	283
14	Dharwar	18	18	1,277	718	320	326	454	354	273	205
15	Bijapur	13	13	1,128	697	321	278	246	254	213	182
16	Kanara	16	16	1,234	391	120	98	96	139	66	57
	Gujarat Registration District.										
17	Surat	12	12	782	681	738	728	857	821	675	489
18	Broach	9	9	404	358	354	333	408	316	253	171
19	Kaira	15	15	579	544	564	595	1,140	827	628	478
20	Panch Mahals ...	7	7	668	415	132	137	132	210	141	86
21	Ahmedabad ...	13	13	871	567	729	716	840	776	525	403
	Sind Registration District.										
22	Karachi	16	16	793	205	546	706	420	281	226	161
23	Hyderabad ...	11	11	862	135	200	181	275	174	122	91
24	Thar and Parkar ...	13	13	904	325	165	157	187	131	42	26
25	Nawabshah ...	9	9	731	94	52	55	50	23	28	23
26	Larkana	15	14	763	47	51	51	22	24	16	19
27	Sukkur	12	12	671	14	58	45	42	47	37	20
28	Upper Sind Frontier.	6	5	410	13	7	8	3	3	...	1
	Total for the Presidency ...	368	365	26,546	14 729	9,905	8 965	10,065	9,770	8,118	6,191

DISEASES *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1929.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	Female.	Total.	7 Ratio of Deaths per 1,000 of Population. Male.	Female.	Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
318	409	355	397	450	481	2,635	2,242	4,877	4·83	4·23	4·53	4·01	1
165	193	204	201	243	323	1,450	1,270	2,720	4·68	4·19	4·44	3·57	2
358	393	398	393	460	489	2 689	2,531	5,220	6·43	6·21	6·32	4·86	3
229	341	367	354	398	458	2,486	1,912	4,398	6·40	5·19	5·81	3·31	4
62	81	70	93	69	95	447	413	860	5·10	6·47	5·67	3·63	5
237	310	326	293	307	385	1,893	1,605	3,498	6·77	5·67	6·23	3·95	6
884	996	793	834	901	879	6,128	4,845	10,973	8·15	12·21	9·55	11·47	7
445	418	430	446	469	431	2,642	2,537	5,179	7·28	7·03	7·15	5·67	8
471	473	501	496	511	564	2,990	3,053	6,043	5·97	6·27	6·12	6·16	9
297	249	278	350	386	345	1,623	1,698	3,321	4·24	4·72	4·47	3·41	10
223	271	271	294	298	306	1,423	1,530	2,953	2·78	2·98	2·88	2·44	11
399	341	366	357	301	342	2,286	1,878	4,164	4·35	2·99	3·61	4·46	12
342	333	360	384	377	364	2,349	1,892	4,241	4·85	4·07	4·47	3·53	13
273	267	307	357	300	339	1,885	1,890	3,775	3·57	3·72	3·64	3·40	14
215	217	237	313	349	333	1,729	1,429	3,158	4·27	3·65	3·97	3·24	15
62	63	66	68	84	83	584	418	1,002	2·86	2·12	2·50	2·30	16
504	514	443	429	483	712	3,989	3,404	7,393	11·81	10·11	10·97	10·48	17
138	145	154	166	159	216	1,496	1,317	2,813	9·43	8·83	9·14	8·96	18
457	534	573	627	544	620	4,213	3,374	7,587	11·10	10·19	10·67	10·42	19
73	62	85	93	97	103	842	514	1,356	4·04	2·83	3·62	3·30	20
380	471	498	480	545	647	3,976	3,034	7,010	8·39	7·32	7·89	7·95	21
157	169	169	187	251	345	2,084	1.534	3,618	6·89	6·73	6·82	4·66	22
59	77	78	84	119	203	979	684	1 663	3·09	2·73	2·93	2·71	23
19	18	11	30	27	65	556	322	878	2·51	1·84	2·22	2·81	24
23	9	7	13	29	39	228	123	351	·93	·67	·84	1·06	25
15	23	15	17	40	44	221	116	337	·67	·43	·56	·26	26
13	19	19	17	55	113	336	139	475	1·19	·61	·93	·31	27
...	...	4	3	1	8	18	15	33	·13	·14	·13	·13	28
6,818	7,313	7,385	7,785	8,253	9,327	54,177	45,719	99,896	5·39	5·01	5·21	4·83	

ANNUAL FORM NO. XII.—DEATHS *registered from during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from Plague were reported.	Number in each District.	Number from which deaths from Plague were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	...	1,478	...	...	...	...	...	...	...
2	West Khandesh ...	10	2	1,242	2	...	...	...	...	...	...
3	Nasik	19	14	1,667	57	203	118	67	6	...	...
4	Thana	19	8	1,546	22	11	18	39	14	4	6
5	Bombay Suburban ...	5	1	86	1	...	1	...	...	...	...
6	Kolaba	13	1	1,482	6	7	1	...	3	10	1
7	City of Bombay ...	1	1	1	1	4	3	6	7	2	4
	Central Registration District.										
8	Ahmednagar ...	15	1	1,346	1	...	1	...	...	...	...
9	Poona	20	5	1,157	12	...	...	2	...	...	...
10	Sholapur	10	8	719	78	32	63	92	27	10	...
11	Satara	18	17	1,341	332	997	631	387	105	48	16
12	Ratnagiri	15	3	1,305	3	8	4	12	2	2	...
	Southern Registration District.										
13	Belgaum ...	15	15	1,069	217	87	62	76	65	64	51
14	Dharwar	18	18	1,277	256	390	332	214	48	38	88
15	Bijapur	13	9	1,128	30	4	4	15	14	2	...
16	Kanara	16	10	1,264	18	4	20	27	8	8	16
	Gujarat Registration District.										
17	Surat	12	4	782	13	29	35	23	5	...	...
18	Broach	9	...	404	...	...	...	...	...	...	...
19	Kaira	15	...	579	...	...	...	...	...	...	...
20	Panch Mahals ...	7	...	668	...	...	...	...	...	...	...
21	Ahmedabad ...	13	1	871	1	...	...	1	...	...	...
	Sind Registration District.										
22	Karachi	16	...	793	...	...	...	...	...	...	...
23	Hyderabad ...	11	...	862	...	...	...	...	...	...	...
24	Thar and Parkar ...	13	...	904	...	...	...	...	...	...	...
25	Nawabshah ...	9	...	731	...	...	...	...	...	...	...
26	Larkana	15	...	763	...	...	...	...	...	...	...
27	Sukkur	12	...	671	...	...	...	...	...	...	...
28	Upper Sind Frontier.	6	...	410	...	...	...	...	...	...	...
	Total for the Presidency ...	368	118	26,546	1,050	1,776	1,293	961	304	188	183

PLAGUE *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1929.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	6 Total. Female.	6 Total. Total.	7 Ratio of Deaths per 1,000 of Population. Male.	7 Ratio of Deaths per 1,000 of Population. Female.	7 Ratio of Deaths per 1,000 of Population. Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
...	...	...	...	...	...	...	...	...	...	...	...	·96	1
...	...	...	3	...	...	3	...	3	·01	...	·00	·13	2
12	78	307	461	146	27	706	719	1,425	1·69	1·77	1·73	·19	3
3	7	15	9	3	11	76	64	140	·19	·17	·18	·14	4
...	...	...	...	...	...	1	...	1	·01	...	·01	·13	5
6	...	...	...	...	...	15	13	28	·06	·05	·05	·16	6
...	2	...	1	...	...	19	10	29	·02	·02	·02	·19	7
...	...	...	...	...	...	...	1	1	...	·00	·00	·12	8
3	8	33	49	15	46	66	90	156	·13	·18	·15	·03	9
192	411	224	214	213	156	727	907	1,634	1·90	2·52	2·20	·46	10
173	374	671	749	488	236	2,137	2,738	4,875	4·19	5·33	4·76	3·27	11
2	1	...	4	7	38	35	45	80	·07	·07	·07	·49	12
192	408	703	848	609	411	1,689	1,887	3,576	3·49	4·66	3·77	·71	13
268	454	885	1,084	989	751	2,374	3,167	5,541	4·49	6·23	5·35	2·42	14
...	15	18	45	88	100	117	183	300	·28	·47	·38	·59	15
7	14	7	2	10	9	64	68	132	·31	·34	·33	·36	16
...	...	...	...	...	...	40	52	92	·12	·15	·14	·19	17
...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	20
...	...	...	...	...	...	1	...	1	·00	...	·00	...	21
...	...	...	...	...	...	...	...	...	...	...	...	·07	22
...	...	...	...	...	...	...	...	...	...	...	...	...	23
...	...	...	...	...	...	...	...	...	...	...	...	...	24
...	...	...	...	...	...	...	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	·01	26
...	...	...	...	...	...	...	...	...	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	...	...	·01	28
858	1,772	2,863	3,469	2,563	1,785	8,070	9,944	18,014	·80	1·09	·94	·51	

APPENDIX

STATEMENT

Showing the Particulars of Vaccination in the

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	WESTERN REGISTRATION DISTRICT.			
	EAST KHANDESH COLLECTORATE—			
1	Chopda Town (Municipal)	16,930	11,358	1
2	Nasirabad do. (Local Fund)... ...	12,188	.....	.....
3	Jalgaon do. (Municipal)	23,710	66	1
4	In the 13 Rural circles. { Local Fund ... / Municipal ... }	1,023,009	224	18
	Total ...	1,075,837	236	20
	WEST KHANDESH COLLECTORATE—			
5	Dhulia Town (Municipal)	30,605	52	1
6	Nandurbar do. (do.)	13,842	.....	1
7	In the 8 Rural circles. { Local Fund ... / Municipal ... }	597,400	109	18
8	Dhulia Jail	.....	.....	S. M. S. 1
	Total ...	641,847	118	{ 15 / S. M. S. 1 }
	NASIK COLLECTORATE—			
9	Nasik. Town (Municipal)	42,756	.....	1
10	Yeola do. (do.)	13,911	8,137	1
11	Malegaon do. (do.)	23,711	930	1
12	Deolali Cantonment	18,789	24	.....
13	In the 12 Rural circles, Local Fund ...	733,409	124	17
	Total ...	832,576	142	20
	THANA COLLECTORATE—			
14	Thana Town (Municipal)	22,639	2,227	1
15	Kalyan do. (do.)	17,829	12,600	1
16	In the 9 Rural circles, Local Fund ...	719,448	205	17
	Total ...	759,916	221	19

IV

No. I

Bombay Presidency during the year 1929-30

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 234	191	425	934	425	238	100	344	78
R. 432	77	509						
P. 200	256	456	492	456	237	119	356	100
R. 31	5	36						
P. 789	692	1,481	1,953	1,481	761	338	1,108	371
R. 312	160	472						
P. 17,511	16,767	34,278	...	34,278	20,336	5,195	25,832	8,348
R. 7,014	662	7,676						
P. 2,162	1,999	4,161	...	4,161	2,357	792	3,161	989
R. 953	82	1,035						
P. 20,896	19,905	40,801	2,526	40,801	23,929	6,544	30,801	9,896
R. 8,742	986	9,728						
P. 968	837	1,805	5,069	1,805	1,114	301	1,474	330
R. 2,537	727	3,264						
P. 470	458	928	1,366	928	503	348	866	62
R 319	119	438						
P. 10,657	10,395	21,052	2,019	21,052	13,466	2,376	16,000	5,019
R. 2,396	545	2,941						
P. 646	624	2,941						
R. 823	158	981		1,270	783	346	1,150	119
P. 5	6	11	1,266	11	1	10	11	...
R. 1,123	126	1,249						
P. 12,746	12,320	25,066	2,263	25,066	15,867	3,381	19,501	5,530
R. 7,198	1,675	8,873						
P. 1,280	1,225	2,505	4,897	2,505	1,104	482	2,162	339
R. 1,804	588	2,392						
P. 283	267	550	602	550	367	128	498	52
R. 50	2	52						
P. 352	342	694	701	694	391	57	448	239
R. 6	1	7						
P. 192	159	351	987	351	120	172	292	49
R. 474	162	636						
P. 13,091	12,918	26,009	1,757	26,009	15,716	3,630	19,437	6,553
R. 2,969	802	3,771						
P. 15,198	14,911	30,109	1,848	30,109	18,198	4,469	22,837	7,232
R. 5,303	1,555	6,858						
P. 413	390	803	2,517	803	596	138	747	53
R. 1,979	435	1,714						
P. 318	283	601	903	601	242	142	394	207
R 194	108	302						
P. 11,943	11,621	23,564	1,501	23,564	14,197	6,711	21,163	2,368
R. 1,170	776	1,946						
P. 12,674	12,294	24,968	1,523	24,968	15,035	6,991	22,304	2,628
R. 2,643	1,319	3,962						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of Successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	WESTERN REGISTRATION DISTRICT.					
	EAST KHANDESH COLLECTORATE—					
1	Chopda Town (Municipal)	509	64	247	99·13	24·61
2	Nasirabad do. (Local Fund)	36	2	28	100·00	25·00
3	Jalgaon do. (Municipal)	472	29	376	99·81	21·32
4	In the 13 Rural circles. Local Fund ...	7,676	2,081	3,102	76·13	45·49
	In the 13 Rural circles. Municipal ...	1,035	191	518	99·65	36·94
	Total ...	9,728	2,367	4,233	99·63	43·07
	WEST KHANDESH COLLECTORATE—					
5	Dhulia Town (Municipal)	3,264	1,298	797	99·73	52·41
6	Nandurbar do. (do.)	438	160	85	100·00	45·33
7	In the 8 Rural circles. Local Fund ...	2,941	1,807	915	99·79	64·51
	In the 8 Rural circles. Municipal ...	981	211	286	99·91	30,36
8	Dhulia Jail	1,249	1,223	...	100·00	97·92
	Total ...	8,873	4,194	2,083	99·82	61·77
	NASIK COLLECTORATE—					
9	Nasik Town (Municipal)	2,392	1,131	681	99·81	66·10
10	Yeola do. (do.)	52	21	...	100·00	43·84
11	Malegaon do. (do.)	...	...	...	105·06	...
12	Deolali Cantonment	...	...	...	96·69	...
13	In the 12 Rural circles, Local Fund ...	3,771	1,030	1,749	99·90	50·94
	Total ...	6,868	2,428	2,755	99·82	59·18
	THANA COLLECTORATE—					
14	Thana Town (Municipal)	1,714	468	481	99·60	36·48
15	Kalyan do. (do.)	...	...	...	10·0	...
16	In the 9 Rural circles, Local Fund ...	1,946	1,132	465	99·84	76·43
	Total ...	3,962	1,715	1,074	99·84	59·38

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
24·09	18·35	48·91	425	25·10	4	·24
29·37	21·92	77·77	.....	.....	4	.....
47·95	25·05	73·30	316	13·33	.....	.....
27·28	24·35	40·41	26,507	25·91	511	·49
3·27	23·76	50·04				
30·83	24·22	43·51	29,948	27·83	519	·48
90·41	18·28	24·41	1,011	33·03	10	·33
74·12	6·68	19·41	376	27·16	5	·38
28·47	23·84	31·11	15,452	25·87	242	·41
1·57	9·37	29·15				
.....	.....	.....	.....	.....	.....	.....
36·92	22·06	23·48	17,862	27·83	257	·40
77·01	13·53	28·47	1,340	31·37	31	·74
37·31	9·45	.....	529	38·03	9	·65
18·89	34·44	.....	601	25·77	72	3·04
28·63	13·96	.....	95	5·06	1	·05
27·94	25·19	46·38	22,179	30·24	332	·45
30·34	24·02	40·17	24,744	29·72	445	.....
53·37	66·00	25·14	913	40·33	3	·13
28·55	25·84	.....	339	19·01	8	·45
30·99	10·05	23·90	19,017	26·56	178	·25
31·61	10·52	29·11	20,356	26·79	189	·25

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	WESTERN REGISTRATION DISTRICT —*contd.*			
	BOMBAY SUBURBAN DISTRICT—			
17	Bandra Town (Municipal)	29,271	...	1
18	Kurla do. (do.)	26,059	...	1
19	Santa Cruz Cantonment	6,953	...	...
20	In the 2 Rural circles, Local Fund ...	91,943	...	2
	Total ...	184,226	...	4
	KOLABA COLLECTORATE—			
21	Panwel Town (Local Fund)	8,625	47	...
22	Alibag do. (do.)	5,274	89	...
23	Mahad do. (do.)	7,192	7,164	...
24	In the 8 Rural circles, Local Fund ...	541,851	249	14
	Total ...	562,942	252	14
	NATIVE STATES—			
25	Jawhar	49,662	161	1
26	Surgana	14,912	41	1
	Total ...	64,574	153	2
	TOTAL BY ESTABLISHMENT IN WESTERN REGISTRATION DISTRICT.			
	Local Fund	3,728,151	172	79
	Municipal	273,451	...	13
	Cantonment	25,742	...	...
	Native States	64,574	153	2
	Dispensary	.....	.....	.....
	Total ...	4,091,918	182	94 S.M.S. 1

No. I—*contd.*

Total number of persons vaccinated.				Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
					Total.	Successful.			Unknown.
						Under one year.	One and under six years.	Total of all ages.	
6				7	8	9	10	11	12
Males.		Females.	Total.						
P.	1,641	648	1,289	4,294	1,289	870	387	1,287	...
R.	1,529	1,483	3,005						
P.	505	537	1,042	1,646	1,042	556	148	722	320
R.	282	322	604						
P.	13	9	22	855	22	19	3	22	...
R.	774	59	833						
P.	1,604	1,541	3,145	241	3,145	1,724	771	2,556	566
R.	1,027	669	1,689						
P.	2,763	2,735	5,498	2,907	5,498	3,169	1,309	4,587	906
R.	3,695	2,526	6,131						
P.	106	103	209	231	209	93	92	187	22
R.	9	13	22						
P.	161	166	327	848	327	131	104	251	76
R.	335	136	521						
P.	105	96	201	228	202	88	80	171	31
R.	25	2	27						
P.	8,886	8,680	17,566	1,372	17,568	1,335	4,308	15,779	1,745
R.	1,239	405	1,644						
P.	9,258	9,045	18,303	1,465	18,306	11,647	4,584	16,388	1,874
R.	1,658	556	2,214						
P.	787	817	1,604	1,608	1,604	1,117	337	1,467	137
R.	4	.....	4						
P.	.....	.....	...	...	...	...	...	...	...
R.	.....	.....	...						
P.	787	817	1,604	1,608	1,604	1,117	337	1,467	137
R.	4	.....	4						
P.	64,264	62,543	12,680	1,862	126,810	77,323	23,386	1,01,732	24,848
R.	16,265	4,008	20,273						
P.	9,061	8,493	17,554	2,487	17,554	10,382	3,707	14,361	3,159
R.	10,513	4,262	14,775						
P.	205	168	373	1,842	373	139	175	314	49
R.	1,248	221	1,469						
P.	787	817	1,604	1,608	1,604	1,117	337	1,467	137
R.	4	0	4						
P.	5	6	11	1,260	11	1	10	11	...
R.	1,123	126	1,249						
P.	74,322	72,027	146,349	1,960	146,352	98,962	27,615	117,885	28,193
R.	29,153	8,617	37,770						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	WESTERN REGISTRATION DISTRICT —*contd.*					
	BOMBAY SUBURBAN DISTRICT—					
17	Bandra Town (Municipal)	3,005	2,545	369	99·84	96·54
18	Kurla do. (do.)	604	257	296	100·00	93·18
19	Santa Cruz Cantonment	838	729	...	100·00	87·61
20	In the 2 Rural circles, Local Fund ...	1,689	809	670	99·88	79·39
	Total ...	6,131	4,370	1,335	99·89	91·12
	KOLABA COLLECTORATE—					
21	Panwel Town (Local Fund)	22	6	7	100·00	40·00
22	Alibag do. (do.)	521	110	186	100·00	32·88
23	Mahad do. (do.)	27	5	9	100·00	27·77
24	In the 8 Rural circles, Local Fund ...	1,644	587	577	99·72	55·01
	Total ...	2,214	708	779	99·73	43·33
	NATIVE STATES—					
25	Jawhar	4	3	1	100·00	100·00
26	Surgana	...	...	...	...	...
	Total ...	4	3	1	100·00	100·00
	TOTAL BY ESTABLISHMENT IN WESTERN REGISTRATION DISTRICT.					
	Local Fund	20,273	7,069	7,708	100·98	56·26
	Municipal	14,775	6,515	4,231	99·76	61·79
	Cantonment	1,469	975	320	96·91	84·86
	Native States	4	3	1	100·00	100·00
	Dispensary	1,249	243	...	100·00	99·52
	Total ...	37,770	14,805	12,260	91·48	62·25

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
130·71	...	12·27	971	23·17	8	·27
38·73	30·71	49·01	761	29·20	6	·23
108·16	...	...	121	17·40	...	...
368·04	186·32	39·76	2,616	286·12	22	2·41
64·56	164·78	21·77	4,657	30·18	36	·24
22·38	10·52	31·82	105	12·17	2	·23
53·44	23·84	35·70	126	23·89	4	·77
24·47	15·34	33·73	106	14·74	1	·14
30·24	9·93	35·09	14,811	27·33	184	·35
30·37	10·23	35·18	15,148	26·91	194	·34
29·60	8·54	25·00	1,367	27·52	...	...
.....	.....	...	365	24·48	...	...
29·60	8·54	25·00	1,732	52·00	...	...
29·18	19·59	39·01	1,00,535	26·86	1,454	·39
76·34	17·94	28·63	11,793	43·12	146	·53
50·07	13·14	21·78	104	4·04	1	·03
22·76	8·54	25·00	866	13·41	...	...
.....	.....	...	...	.....	...	...
32·62	18·96	32·25	113,298	27·90	1,601	·38

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
27	BOMBAY CITY	1,175,914	52,146	9
	CENTRAL REGISTRATION DISTRICT.			
	AHMEDNAGAR COLLECTORATE—			
30	Sangamner Town (Local Fund) ...	12,737	23,781	.....
28	Ahmednagar Town (Municipal) ...	34,358	11,292	1
29	Ahmednagar Cantonment	10,997	1,648	.....
31	In the 12 Rural Circles (Local Fund) ...	682,986	134	17
	Total ...	741,088	125	18
	POONA COLLECTORATE—			
34	Junnar Town (Local Fund) ...	7,381	.....	.....
35	Baramati do. (do.)	11,905	.....	.....
36	Khed do. (do.)	7,018	.....	.....
37	Lonavla do. (do.)	6,337	.....	.....
32	Poona City (Municipal)	133,227	23,451	2
33	Poona and Kirkee Cantonments ...	41,032	3,392	2
38	In the 11 Rural Circles { Local Fund ... / Municipal ... }	791,659	165	15
39	Yeravda Central Prison	... ..	.....	Medical Officer. 1
	Total ...	998,554	184	19 / Medical Officer. 1
	SHOLAPUR COLLECTORATE—			
40	Sholapur Town (Municipal) ...	119,347	12,269	2
41	Barsi do. (do.) ...	22,074	1,170	1
42	Pandharpur do. (do.) ...	25,210	47,583	1
43	In the 7 Rural Circles { Local Fund ... / Municipal ... }	575,606	146	1 / 11
	Total ...	742,237	168	15

No. 1—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 13,161	13,226	26,387	.....	26,387	15,692	7,424	23,338	2,900
R. 55,045	33,818	88,863						
P. 330	270	60	2,197	600	334	181	538	62
R. 1,241	356	1,597						
P. 1,944	1,083	2,327	5,105	2,328	1,531	418	2,148	171
R. 2,361	417	2,778						
P. 260	195	455	460	455	321	98	417	34
R. 5	.....	5						
P. 12,696	12,532	25,218	30,373	25,220	17,934	4,984	23,122	2,087
R. 4,169	986	5,155						
P. 14,530	14,070	28,600	2,118	28,603	20,120	5,681	26,225	2,354
R. 7,776	1,759	9,535						
P. 122	104	226	465	226	114	87	207	19
R. 168	71	239						
P. 151	170	321	373	321	202	89	293	28
R. 25	27	52						
P. 136	116	252	597	252	123	98	233	19
R. 375	70	345						
P. 131	98	229	1,084	229	115	91	219	10
R. 560	295	855						
P. 4,209	4,070	8,279	19,586	8,279	5,360	2,202	7,969	305
R. 20,610	10,283	30,893						
P. 908	848	1,756	8,404	1,756	1,135	394	1,563	192
R. 9,330	5,732	15,062						
P. 12,416	12,168	24,584	3,072	24,585	15,757	6,136	22,140	2,444
R. 9,585	3,060	12,945						
P. 357	306	663		663	380	200	604	59
R. 5,166	2,719	7,885						
P. 9	12	21	1,374	21	14	4	21	...
R. 1,340	113	1,358						
P. 18,439	17,892	36,331	5,298	36,332	23,220	9,301	33,249	3,076
R. 47,259	22,370	69,629						
P. 3,989	2,998	6,287	6,373	6,288	3,322	1,987	5,713	573
R. 4,506	1,954	6,460						
P. 599	581	1,180	2,945	1,180	544	456	1,039	139
R. 143	33	176						
P. 959	905	1,864	5,087	1,864	941	495	1,639	225
R. 2,471	752	3,223						
P. 9,321	9,133	18,454	2,053	18,454	11,487	4,713	16,458	1,988
R. 3,296	837	4,133						
P. 706	647	1,353		1,353	934	298	1,242	111
R. 141	24	165						
P. 14,874	14,264	29,138	2,889	29,139	17,228	7,949	26,091	3,036
R. 10,557	3,600	14,157						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
27	BOMBAY CITY	88,863	...	88,863	99·91	...
	CENTRAL REGISTRATION DISTRICT.					
	AHMEDNAGAR COLLECTORATE—					
30	Sangamner Town (Local Fund)	1,597	650	286	100·00	49·68
28	Ahmednagar Town (Municipal)	2,778	2,611	132	99·58	98·68
29	Ahmednagar Cantonment	5	1	...	99·05	20·00
31	In the 12 Rural Circles (Local Fund) ...	5,155	2,723	1,039	99·95	66·16
	Total ...	9,535	5,985	1,457	99·91	74·09
	POONA COLLECTORATE—					
34	Junnar Town (Local Fund)	239	99	29	100·00	47·14
35	Baramati do. (do.)	32	32	9	100·00	74·42
36	Khed do. (do.)	345	96	74	100·00	39·12
37	Lonavla do. (do.)	855	4	851	100·00	100·00
32	Poona City (Municipal)	30,893	172	30,604	99·94	59·52
33	Poona and Kirkee Cantonments ...	15,062	919	13,576	99·94	61·84
38	In the 11 Rural Circles { Local Fund ...	12,946	5,871	4,515	99·99	69·64
	{ Municipal ...	7,885	2,627	5,107	100·00	94·58
39	Yeravda Central Prison	1,353	22	28	100·00	1·66
	Total ...	69,630	9,842	54,793	99·98	66·60
	SHOLAPUR COLLECTORATE—					
40	Sholapur Town (Municipal)	6,460	4,737	1,005	99·97	86·84
41	Barsi do. (do.)	176	114	35	90·80	80·85
42	Pandharpur do. (do.)	3,223	2,885	322	100·00	99·10
43	In the 7 Rural Circles { Local Fund ...	4,136	2,743	738	99·95	80·77
	{ Municipal ...	165	119	43	100·00	93·46
	Total ...	14,160	10,598	2,143	99·95	88·20

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
90·11	11·56	100·00	19,722	17·68	758	·64
93·27	10·33	17·91	294	23·08	1	·08
138·51	7·35	4·75	1,225	35·65	26	·75
38·10	7·47	.....	216	19·64	.....	.....
37·84	8·28	20·16	20,857	30·54	176	·26
43·46	8·23	14·65	22,592	30·49	203	·27
41·46	8·41	12·13	228	30·89	1	·14
27·30	8·71	17·31	368	30·98	1	·08
46·91	7·54	21·45	133	18·96	1	·14
15·19	4·37	99·53	149	23·51	2	·32
61·11	3·68	99·06	4,042	30·34	184	1·38
60·49	10·93	90·13	1,465	33·29	2	·05
39·46	9·94	34·88	19,794	25·00	113	·14
	8·90	64·77				
.....	.....	2·07	.....	.....	.....	.....
43·15	8·47	80·21	26,179	26·22	304	·30
87·56	9·11	15·56	3,237	27·12	164	1·37
55·23	11·78	19·89	690	31·26	3	·14
179·45	12·07	9·99	684	27·13	12	·48
35·59	10·77	17·85	16,352	28·41	81	·14
	8·20	72·12				
49·49	10·40	15·13	20,963	28·29	260	·35

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	CENTRAL REGISTRATION DISTRICT—*contd.*			
	SATARA COLLECTORATE—			
44	Satara Town (Municipal)	20,045	7,485	1
45	Wai do. (Local Fund)	10,211	1,266	.....
46	Karad do. (do.)	10,243	6,381	.....
47	Ashta do. (do.)	9,021	.....	.....
48	Islampur do. (do.)	7,916	.....	.....
49	In the 14 Rural Circles { Local Fund ... / Municipal ... }	967,974	213	19
	Total ...	1,025,410	209	20
	RATNAGIRI COLLECTORATE—			
50	Ratnagiri Town (Local Fund)	14,600	2,643	.....
51	Chiplun do. (do.)	11,005	.....	.....
52	Malwan do. (do.)	22,215	.....	.....
53	Vengurla do. (do.)	19,126	5,764	.....
54	In the 11 Rural Circles (Local Fund) ...	1,128,270	286	21
	Total ...	1,195,216	289	21
	TOTAL BY ESTABLISHMENT IN CENTRAL REGISTRATION DISTRICT.			
	Local Fund	4,201,029	185	83
	Municipal	449,467	7,979	8
	Cantonment	52,009	2,752	2
	Dispensaries (Yeravda and Railways) ...	.....	.....	M. O.. 3
	Total ...	4,702,505	.....	93 M. O. 3

No. I—*contd.*

	Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
					Total.	Successful.			Unknown.
						Under one year.	One and under six years.	Total of all ages.	
	6			7	8	9	10	11	12
	Males.	Females.	Total.						
P.	489	445	934	3,321	934	310	197	508	426
R.	1,667	720	2,387						
P.	196	157	353	559	353	238	93	341	12
R.	121	85	206						
P.	327	300	627	4,795	627	329	207	618	6
R.	3,570	598	4,168						
P.	181	150	331	351	331	259	37	298	33
R.	16	4	20						
P.	169	138	307	452	307	241	53	300	7
R.	85	60	145						
P.	15,882	15,429	31,311	3,036	31,311	22,398	4,886	27,534	3,761
R.	19,816	5,478	25,294						
P.	70	58	128	...	128	25	21	47	81
R.	530	420	950						
P.	17,304	16,687	33,991	3,358	33,991	23,800	5,484	29,646	4,326
R.	25,805	7,365	33,170						
P.	163	148	311	375	311	198	101	303	8
R.	53	11	64						
P.	159	137	296	379	296	160	121	282	14
R.	56	27	83						
P.	163	165	328	352	328	187	127	320	8
R.	18	6	24						
P.	146	140	286	586	286	161	102	274	12
R.	153	147	300						
P.	17,884	16,826	34,710	1,892	34,710	23,639	8,370	32,774	1,934
R.	3,584	1,454	5,038						
P.	18,515	17,416	35,931	1,973	35,931	24,345	8,821	33,953	1,976
R.	3,864	1,645	5,509						
P.	70,563	68,181	138,744	2,402	138,747	93,876	30,476	126,254	12,452
R.	47,091	13,572	60,663						
P.	11,922	11,093	23,015	9,741	23,017	13,367	6,264	20,909	2,090
R.	37,595	17,322	54,917						
P.	1,168	1,043	2,211	8,639	2,211	1,456	492	1,980	226
R.	9,335	5,732	15,067						
P.	212	193	405	839	405	215	137	382	7
R.	1,644	468	2,112						
P.	83,865	80,510	164,375	3,095	164,380	108,914	37,369	149,525	14,775
R.	95,665	37,094	132,759						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	CENTRAL REGISTRATION DISTRICT—*contd.*					
	SATARA COLLECTORATE—					
44	Satara Town (Municipal)	2,387	19	2,314	100·00	26·03
45	Wai do. (Local Fund)	206	74	23	100·00	40·44
46	Karad do. (do.)	4,168	44	4,046	99·52	36·07
47	Ashta do. (do.)	20	8	8	100·00	66·67
48	Islampur do. (do.)	145	73	56	100·00	82·02
49	In the 14 Rural Circles—Local Fund ...	25,294	5,738	16,936	99·94	68·65
	In the 14 Rural Circles—Municipal ...	950	7	894	100·00	12·50
	Total ...	33,170	5,963	24,277	99·94	67·05
	RATNAGIRI COLLECTORATE—					
50	Ratnagiri Town (Local Fund)	64	18	40	100·00	75·10
51	Chiplun do. (do.)	83	67	10	100·00	91·78
52	Malwan do. (do.)	24	...	...	100·00	...
53	Vengurla do. (do.)	300	113	41	100·00	43·63
54	In the 11 Rural Circles (Local Fund) ...	5,038	3,157	877	99·99	75·87
	Total ...	5,509	3,355	968	99·99	73·88
	TOTAL BY ESTABLISHMENT IN CENTRAL REGISTRATION DISTRICT.					
	Local Fund	60,667	21,510	29,578	99·97	69·19
	Municipal	54,917	13,291	40,456	99·91	91·81
	Cantonment	15,067	920	13,576	99·75	61·70
	Dispensaries (Yeravda and Railways) ...	2,112	508	54	95·98	24·68
	Total ...	132,763	36,229	83,664	99·95	73·79

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
70·41	45·61	96·94	587	29·29	12	·60
40·64	3·40	11·17	332	32·51	4	·39
64·63	0·96	97·07	325	31·73	1	·10
33·92	9·97	40·00	225	24·94	...	...
47·12	2·28	38·62	249	31·46	6	·76
34·43	12·01	66·96	27,536	28·45	156	·16
	81·28	94·11				
34·73	12·73	73·19	29,255	28·53	179	·17
21·98	2·57	6·25	631	43·22	14	·96
31·71	4·73	12 05	282	25·62	7	·63
14·40	2·44	.....	440	19·80	6	·27
20·23	4·20	13·67	291	15·21	3	·15
31·84	5·57	17·41	31,278	27·72	369	·32
31·22	5·50	17·53	32,922	27·54	399	·33
35·17	8·82	48·75	118,·83	28·11	926	·22
76·09	9·08	73·67	12,147	27·03	417	·93
55·76	10·22	90·10	1,881	36·17	3	·06
.....	1·72	2·56	.....	.....	.....	.....
39·50	8·99	63·02	132,111	28·09	1,346	·29

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.	
1	2	3	4	5	
	SOUTHERN REGISTRATION DISTRICT.				
	BELGAUM COLLECTORATE—				
55	Gokak Town (Municipal)	9,989	18,184	.....	
56	Athani do. (do.)	13,538	15,052	.....	
57	Belgaum do. (do.)	36,219	69,691		1
58	Do. Cantonment ...	6,889	3,369	S. A. S.	1
59	In the 8 Rural circles	883,101	190		17
60	Hindalgi Central Prison ...	.....	.....	M. O.	1
	Total ...	949,736	4,611		18
				S. A. S.	1
				M. O.	1
	DHARWAR COLLECTORATE—				
61	Dharwar Town (Municipal) ...	34,327	25,389		1
62	Hubli do. (do.) ...	69,140	52,067		1
63	Gadag-Betigeri do. (do.) ...	41,158	108,675		1
64	Ranebennur do. (Local Fund) ...	13,930	29,543	.....	
65	In the 13 Rural circles (do.) ...	877,654	194		19
	Total ...	1,036,209	4,606		22
	BIJAPUR COLLECTORATE—				
66	Bijapur Town (Municipal)	32,471	129		1
67	Bagalkot do. (do.)	19,471	393		1
68	In the 8 Rural circles	744,414	42		16
69	Bijapur Prison	.....	.....	M. O.	1
	Total ...	796,356	5,707		18
				M. O.	1

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 152	116	268	519	268	134	56	195	73
R. 221	30	251						
P. 123	112	235	557	235	151	34	195	40
R. 279	43	322						
P. 758	739	1,497	3,806	1,497	891	526	1,446	49
R. 1,727	582	2,309						
P. 163	130	293	2,388	293	175	52	227	51
R. 1,227	868	2,095						
P. 14,853	14,651	29,504	2,816	29,504	21,962	5,378	27,585	1,868
R. 15,646	2,729	18,375						
P. 5	5	10	1 253	10	3	6	9	1
R. 1,183	60	1 243						
P. 16,054	15,753	31,807	2,820	31,807	23,316	6,052	29,657	2,082
R. 20,283	4,312	24,595						
P. 751	737	1,488	3,623	1,488	1,222	233	1,487	1
R. 1,669	466	2,135						
P. 1,403	1,346	2,749	8,105	2,749	2,314	359	2,692	57
R. 3,938	1,418	5,356						
P. 753	751	1,504	2,876	1,504	1,095	320	1,421	79
R. 997	375	1,372						
P. 116	142	258	388	258	195	48	243	15
R. 94	36	130						
P. 13,082	12,733	25,815	2,560	25,815	17,660	6,685	24,672	1,110
R. 18,313	4,504	22,817						
P. 16,105	15,709	31,814	2,892	31,814	22,486	7,645	30,515	1,262
R 25,011	6,799	31,810						
P. 1,095	1,043	2,143	8,049	2,143	1,300	772	2,137	4
R. 4,060	1,846	5,906						
P. 255	250	505	1,358	505	403	82	491	14
R. 652	201	853						
P. 12,848	12,743	25,591	2,873	25,591	17,676	7,058	25,018	562
R. 16,885	3,486	20,371						
P. 11	15	26	832	26	4	15	26	...
R. 723	83	806						
P. 14,209	14,056	28,265	2,958	28,265	19,383	7,927	27,672	520
R. 22,320	5,616	27,936						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination
1	2	13	14	15	16	17
	SOUTHERN REGISTRATION DISTRICT.					
	BELGAUM COLLECTORATE—					
55	Gokak Town (Municipal)	251	77	119	100·00	58·33
56	Athani do. (do.)	322	37	190	100·00	28·03
57	Belgaum do. (do.)	2,309	1,363	348	99·88	69·51
58	Do. Cantonment	2,095	325	742	98·80	24·11
59	In the 8 Rural circles	18,375	4,953	5,588	99·62	38·73
60	Hindalgi Central Prison	1,243	965	12	100·00	78·39
	Total ...	24,595	7,720	6,999	99·37	48·87
	DHARWAR COLLECTORATE—					
61	Dharwar Town (Municipal) ...	2,135	576	254	100·00	30·62
62	Hubli do. (do.) ...	5,356	191	4,847	100·00	37·52
63	Gadag-Betigeri do. (do.) ...	1,372	468	363	99·72	46·88
64	Ranebennur do. (Local Fund) ...	130	44	35	100·00	46·32
65	In the 13 Rural circles (do.)	22,817	4,768	7,705	99·87	31·55
	Total ...	31,810	6,047	13,204	99·88	32·50
	BIJAPUR COLLECTORATE—					
66	Bijapur Town (Municipal)	5,906	1,522	2,280	99·91	41·57
67	Bagalkot do. (do.)	853	412	147	100·00	58·36
68	In the 8 Rural circles	20,371	7,235	5,972	99·96	50·25
69	Bijapur Prison	806	642	19	100·00	81·58
	Total ...	27,936	9,811	8,368	99·95	50·14

No. 1—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
29·23	27·24	47·41	336	33·64	6	0·60
17·14	17·02	59·01	382	28·22	.....	.....
77·56	3·27	15·07	1,352	37·33	14	0·39
80·53	17·41	35·42	323	46·89	1	0·15
36·85	6·33	30·41	30,470	34·50	154	0·17
.....	10·00	0·97	447	.....	.....	.....
39·36	6·55	28·05	33,310	35·07	175	0·18
60·08	0·07	11·90	1,490	43·41	2	0·06
40·97	2·07	90·50	2,722	39·37	3	0·04
45·09	5·25	26·46	1,633	39·68	9	0·22
20·60	5·81	26·92	479	34·39	9	0·65
33·54	4·30	33·77	26,061	29·69	131	0·15
35·28	3·97	41·51	32,385	31·25	154	0·15
112·69	0·18	37·76	1,501	46·23	7	0·22
46·38	2·77	17·23	699	35·90	1	0·05
43·33	2·20	29·31	27,473	36·91	71	0·10
.....	.....	2·36	377	.....	.....	.....
47·60	2·05	29·95	30,050	37·73	79	0·10

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	SOUTHERN REGISTRATION DISTRICT—*contd.*			
	KANARA COLLECTORATE—			
70	Karwar Town (Municipal)	14,463	1,533	1
71	Kumtha Town (Local Fund)	14,291	1,407	.....
72	In the 11 Rural circles (Local Fund) ...	372,722	102	15
	Total ...	401,476	3,946	16
	BIJAPUR AGENCY—			
73	Jath and Daflapur	82,654	84	2
	DHARWAR AGENCY—			
74	Savanur State	16,830	240	1
	TOTAL BY ESTABLISHMENT IN THE SOUTHERN REGISTRATION DISTRICT—			
	Municipal ...	270,776	.....	7
	Cantonment	6,889	3,369	S. A. S. 1
	Local Funds	2,906,112	.....	67
	Indian States	99,484	.....	3
	Dispensaries	.....	.....	M. Os. 2
	Total ...	3,283,261	.....	77 M. O. 3
	GUJARAT REGISTRATION DISTRICT.			
	SURAT COLLECTORATE—			
75	Surat City (Municipal)	117,434	39,144	2
76	Rander Town (Local Fund)	10,547	19,531·48	.....
77	Bulsar do. (do.)	19,822	7,928·80	.....
78	In the 9 Rural circles (Local Fund) ...	526,548	320·10	11
79	Mission Hospital, Bulsar	.....	.....	.....
80	Surat Dispensary	.....	.....	.....
	Udhna Railway Dispensary	.....	.....	.....
	Bulsar do.	.....	.....	.....
	Total ...	674,351	40·8	13

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 133	137	270	556	270	41	195	263	4
R. 155	131	286						
P. 185	121	306	437	306	71	196	305	...
R. 95	36	131						
P. 5,439	4,437	9,876	...	9,876	2,579	5,833	9,669	187
R. 3,990	1,694	5,684						
P. 5,757	4,695	10,452	1,035	10,452	2,691	6,224	10,237	191
R. 4,240	1,861	6,101						
P. 1,145	1,070	2,215	1,721	2,215	1,230	982	2,215	...
R. 1,071	156	1,227						
P. 426	418	844	1,139	844	748	69	822	16
R. 1,141	292	1,433						
P. 5,423	5,236	10,659	4,207	10,659	7,551	2,577	10,327	321
R. 13,698	5,092	18,790						
P. 163	130	293	2,388	293	175	52	227	51
R. 1,227	868	2,095						
P. 46,523	44,827	91,350	2,371	91,350	60,143	25,198	87,492	3,742
R. 55,023	12,485	67,508						
P. 1,571	1,488	3,059	1,906	3,059	1,978	1,051	3,037	16
R. 2,212	448	2,660						
P. 16	20	36	1,043	36	7	21	35	1
R. 1,906	143	2,049						
P. 53,696	51,701	105,397	2,577	105,397	69,854	28,899	101,118	4,131
R. 74,066	19,036	93,102						
P. 2,733	2,454	5,187	4,341	5,187	2,051	1,156	3,299	1,832
R. 2,409	1,087	3,496						
P. 185	190	375	419	375	102	190	292	83
R. 27	17	44						
P. 333	332	665	1,226	665	293	294	612	53
R. 371	199	561						
P. 8,528	8,354	16,882	1,742	16,882	9,997	4,311	14,650	2,192
R. 1,639	642	2,281						
P. 28	21	49	...	49	26	15	49	...
R. 182	108	290						
P. 42	41	83	...	83	36	46	83	...
R. 36	2	38						
P. 36	31	67	...	67	23	34	67	...
R. 52	6	58						
P. 62	34	96	...	96	47	37	94	...
R. 68	66	134						
P. 11,947	11,457	23,404	2,351	23,404	12,575	6,083	19,146	4,160
R. 4,784	2,118	6,902						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	SOUTHERN REGISTRATION DISTRICT—*contd.*					
	KANARA COLLECTORATE—					
70	Kaswar Town (Municipal)	286	119	17	98·87	40·59
71	Kumtha Town (Local Fund)	131	89	25	95·67	13·96
72	In the 11 Rural circles (Local Fund) ...	5,684	2,693	1,159	99·81	59·51
	Total ...	6,101	2,901	1,201	99·64	59·20
	BIJAPUR AGENCY—					
73	Jath and Daflapur	1,227	214	422	100·00	26·38
	DHARWAR AGENCY—					
74	Savanur State	1,433	668	215	99·28	54·84
	TOTAL BY ESTABLISHMENT IN THE SOUTHERN REGISTRATION DISTRICT—					
	Municipal	18,790	4,765	8,515	99·90	46·37
	Cantonment	2,025	325	742	93·80	24·02
	Local Funds	67,508	19,782	20,484	99·87	42·07
	Indian States	2,660	882	637	99·81	43·60
	Dispensaries	2,049	1,607	31	100 00	79·63
	Total ...	93,102	27,361	30,409	99·85	43·64
	GUJARAT REGISTRATION DISTRICT.					
	SURAT COLLECTORATE—					
75	Surat City (Municipal)	3,496	275	2,924	98·33	48·08
76	Rander Town (Local Fund)	44	6	16	100·00	21·43
77	Bulsar do. (do.)	561	174	377	100·00	94·56
78	In the 9 Rural circles (Local Fund) ...	2,281	665	814	99·73	45·33
79	Mission Hospital, Bulsar	290	112	30	100·00	43·08
80	Surat Dispensary	38	10	...	100·00	26·32
	Udhna Railway Dispensary	58	46	...	100·00	100·00
	Bulsar do.	134	133	...	97·92	99·25
	Total ...	6,902	1,421	4,161	99·49	51·84

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
26·41	1·48	5·94	537	37·13	9	0·62
27·34	.....	19·08	826	57·80	2	0·14
33·17	1·69	20·39	13,053	35·03	120	0·32
32·07	1·82	19·69	14,416	35·91	131	0·33
29·38	.....	34·39	2,172	26·28	.....	.....
8·53	0·90	15·00	922	54·78	.....	.....
55·75	3·01	45·32	10,653	39·35	51	0·19
80·13	17·41	35·42	323	46·88	1	0·15
36·91	4·10	36·34	98,361	33·84	467	0·17
39·39	0·52	23·95	3,166	31·83	.....	.....
.....	2·78	1·56	824	.....	.....	.....
39·01	3·02	32·66	112,369	34·25	579	0·17
30·43	35·31	83·64	2,691	22·91	163	2·24
28·25	22·13	36·36	173	16·40	18	1·71
39·65	7·97	67·20	430	21·69	6	·30
29·09	12·98	35·70	14,315	27·19	106	·20
.....	.....	10·34	17	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
30·50	17·77	60·28	17,626	26·14	393	·58

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	GUJARAT REGISTRATION DISTRICT—*contd.*			
	BROACH COLLECTORATE—			
81	Broach City (Municipal)	42,648	25,325·71	1
82	Jambusar Town (Local Fund)	10,217	18,916·66	...
83	Ankleshwar do. (do.)	11,762	3,078·53	...
84	In the 6 Rural Circles (*Local Fund*) ...	243,118	166·29	5
	Broach Railway Dispensary	.....	.....	.....
	Total ...	307,745	210	6
	KAIRA COLLECTORATE—			
85	Kaira Town (Local Fund)... ...	8,277	29,560·71	...
86	Mehmedabad Town (do.)... ...	6,238	51,983·33	...
87	Nadiad Town (Municipal)	31,939	96,784·84	1
88	Borsad do. (do.)	12,116	63,768·42	...
89	Anand do. (do.)	11,054	10,732·04	...
90	Umreth do. (do.)	14,024	181·88	...
91	Dakore do. (do.)	7,990	1,336·12	...
92	Kapadvanj Town (do.)	14,794	64,321·73	...
93	In the 7 Rural Circles (Local Fund) ...	604,550	382·60	10
	Anand Railway Dispensary	.....	.....	.....
	Total ...	710,982	445	11
	PANCH MAHALS COLLECTORATE—			
94	Godhra Town (Local Fund)	26,979	158,900·8	...
95	Dohad do. (do.)	16,076	94,564·71	...
96	In the 5 Rural Circles (Local Fund) ...	331,805	206·65	7
	Godhra Railway Dispensary	.....	.....	.....
	Dohad do. (do.)	.....	.....	.....
	Dohad Coast (do.)	.....	.....	.....
	Total ...	374,860	233	7

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 908	885	1,793	2,466	1,763	1,105	348	1,464	325
R. 478	195	673						
P. 294	280	574	625	575	258	239	504	70
R. 46	5	51						
P. 210	213	423	482	423	181	119	309	114
R. 38	21	59						
P. 3,887	3,794	7,681	1,622	7,681	4,923	1,699	6,667	1,0[illegible]2
R. 333	125	458						
P. 32	37	69	...	69	27	38	65	...
R. 64	28	92						
P. 5,331	5,209	10,540	1,979	10,541	6,494	2,443	9,009	1,511
R. 959	374	1,333						
P. 129	132	261	339	261	182	65	248	9
R. 166	12	178						
P. 166	104	220	342	220	147	62	209	7
R. 111	11	122						
P. 590	549	1,139	1,551	1,139	702	250	959	179
R. 289	123	412						
P. 234	221	455	920	455	328	61	389	65
R. 226	239	465						
P. 255	230	485	1,401	485	314	147	462	23
R. 621	295	916						
P. 231	196	427	429	427	250	137	396	28
R. 1	1	2						
P. 151	125	276	337	276	165	76	243	33
R. 52	9	61						
P. 276	236	512	575	512	337	122	459	52
R. 57	6	63						
P. 9,450	8,421	17,871	1,902	17,875	12,914	3,068	16,072	1,741
R. 922	229	1,151						
P. 4	1	5	...	5	1	3	5	...
R.	.....	...						
P. 11,435	10,215	21,651	2,638	21,655	15,340	3,991	19,442	2,137
R. 2,445	925	3,370						
P. 786	732	1,518	2,912	1,519	1,044	297	1,361	146
R. 958	436	1,394						
P. 334	368	702	737	702	436	221	658	43
R. 30	5	35						
P. 5,770	5,455	11,225	1,671	11,231	7,819	2,341	10,191	1,016
R. 338	133	471						
P. 63	44	107	...	107	31	59	92	14
R. 40	26	66						
P. 18	26	44	...	44	15	24	40	1
R. 1	2	3						
P. 13	20	33	...	33	12	11	23	..
R. 1	.....	1						
P. 6,934	6,645	13,629	2,228	13,636	9,357	2,953	12,365	1,220
R. 1,368	602	5,970						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	GUJARAT REGISTRATION DISTRICT—*contd.*					
	BROACH COLLECTORATE—					
81	Broach City (Municipal)	673	82	440	99·73	35·19
82	Jambusar Town (Local Fund)	51	20	14	99·80	54·05
83	Ankleshwar do. (do.)	59	9	27	100·00	28·13
84	In the 6 Rural Circles (Local Fund) ...	458	99	128	99·82	30·00
	Broach Railway Dispensary	92	20	33	94·20	33·90
	Total ...	1,333	230	642	99·77	33·29
	KAIRA COLLECTORATE—					
85	Kaira Town (Local Fund) ...	178	27	48	98·41	20·77
86	Mehmedabad Town (do.) ...	122	29	22	98·12	29·00
87	Nadiad Town (Municipal)	412	86	122	99·90	29·65
88	Borsad do. (do.)	479	81	78	99·74	20·20
89	Anand do. (do.)	916	245	77	100·00	29·20
90	Umreth do. (do.)	2	...	...	99·25	...
91	Dakore do. (do.)	61	6	15	100·00	13·04
92	Kapadvanj Town (do.)	68	8	28	99·78	22·86
93	In the 7 Rural Circles (Local Fund) ...	1,151	331	284	99·62	38·18
	Anand Railway Dispensary	...	...	...	100·00	...
	Total ...	3,384	813	674	99·61	30·00
	PANCH MAHALS COLLECTORATE—					
94	Godhra Town (Local Fund)	1,394	557	468	99·13	60·15
95	Dohad do. (do.)	35	11	10	99·85	44·00
96	In the 5 Rural Circles (Local Fund) ...	471	156	125	99·77	45·08
	Godhra Railway Dispensary	66	66	...	98·92	100·00
	Dohad do. (do.)	3	3	..	98·02	100·00
	Dohad Coast (do.)	1	...	...	69·70	...
	Total ...	1,970	793	603	99·59	58·01

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 5,486	5,189	10,675	6,757	10,878	8,425	1,089	9,539	1,006
R. 11,764	4,589	16,353						
P. 162	187	349	441	349	228	95	326	22
R. 77	15	92						
P. 395	405	800	1,117	800	439	313	758	41
R. 239	78	317						
P. 437	411	848	1,583	848	541	233	780	63
R. 557	178	735						
P. ...	.....	...	...	...	...	...	...	...
R. ...	.....	...						
P. 9,199	8,546	17,745	1,804	17,751	12,428	3,060	15,550	2,133
R. 3,116	787	3,903						
P. 81	53	134	...	134	66	41	107	...
R. 3,693	211	3,904						
P. 49	42	91	...	91	41	46	91	...
R. 3	1	4						
P. 16	9	25	...	25	6	19	25	...
R. ...	.....	...						
P. 21	16	37	...	37	36	1	37	...
R. ...	.....	...						
P. 16	19	35	...	35	15	12	31	...
R. 7	5	12						
P. 15,862	14,877	30,739	3,504	30,948	22,225	4,909	27,244	3,265
R. 19,456	5,864	25,320						
P. 13,408	12,770	26,178	1,872	26,178	21,141	3,240	24,569	1,576
R. 2,799	978	3,777						
P. 3,387	3,327	6,814	1,904	6,815	5,148	1,139	6,395	403
R. 618	183	801						
P. 352	344	696	825	696	294	344	645	51
R. 113	16	129						
P. 107	102	209	1,267	209	153	37	198	11
R. 545	513	1,058						
P. 88	74	162	...	162	105	15	153	6
R. 294	43	337						
P. 9,717	9,077	18,794	4,966	18,997	12,283	2,843	15,261	3,342
R. 14,940	5,994	20,934						
P. 41,821	39,378	81,199	2,081	81,217	53,773	17,531	71,979	8,998
R. 10,583	3,963	14,546						
P. 16,895	16,097	32,992	1,878	32,993	26,289	4,379	30,964	1,979
R. 3,417	1,161	4,578						
P. ...	...	...	...	...	...	...	...	...
R. ...	...	...						
P. 569	468	1,037	...	1,037	487	401	962	21
R. 4,441	498	4,939						
P. 69,002	65,020	134,022	2,419	134,244	92,832	25,154	119,166	14,340
R. 33,381	11,616	44,997						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	GUJARAT REGISTRATION DISTRICT—*concld.*					
	AHMEDABAD COLLECTORATE—					
97	Ahmedabad City (Municipal)	16,354	486	14,932	96·68	34·18
98	Dhandhuka Town (Local Fund)... ...	92	11	29	99·69	17·46
99	Viramgam do. (do.)... ...	317	25	128	99·87	13·76
100	Dholka do. (do.)... ...	735	156	175	99·36	27·85
101	Ahmedabad Cantonment	...	...	...	...	...
102	In the 8 Rural Circles (Local Fund) ...	3,905	930	1,112	99·56	19·52
103	Ahmedabad Central Prison	3,904	3,450	135	79·85	91·54
104	Sabarmati Railway Dispensary	4	4	...	100·00	100·00
105	Ahmedabad Railway Dispensary ...	...	...	...	100·00	...
	Kankaria do. (do.) ...	...	...	...	100·00	...
	Viramgam do. (do.) ...	12	...	...	88·57	...
	Total ...	25,323	5,063	16,541	98·41	57·65
	INDIAN STATES—					
106	Rewa Kantha Agency	3,777	959	639	99·85	30·56
107	Mahi Kantha Agency	801	380	100	99·78	47·08
108	Dangs (Local Fund)	129	46	38	100·00	50·55
109	Jambughoda (Local Fund)	1,058	595	182	100·00	67·92
110	Sadra Dispensary	337	284	17	98·08	88·75
	TOTAL BY ESTABLISHMENT IN THE GUJARAT REGISTRATION DISTRICT.					
	Municipal	20,585	929	18,418	97·48	36·91
	Local Fund	14,562	4,188	4,225	99·67	40·51
	Indian States	4,578	1,269	739	99·84	33·58
	Cantonment	...	...	...	...	...
	Dispensaries	4,939	4,128	215	94·69	87·38
	Total ...	45,014	10,534	23,597	99·38	49·19

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
36·25	18·33	65·39	1,266	29·68	2	·05
51·29	12·17	27·45	240	23·49	...	...
27·09	26·95	45·76	326	27·72	...	...
27·83	13·04	27·95	6,835	28·11	90	·37
.....	.....	35·87	.....	.....	.....	.....
30·02	14·33	48·16	8,667	28·16	92	·30
33·22	3·44	26·97	221	26·70	...	.....
38·15	3·18	18·03	193	30·94	1	·16
32·72	15·72	29·61	823	25·77	5	·16
38·79	14·28	16·28	418	34·50	.....	.....
63·95	4·74	8·41	304	27·50	... ...	.....
28·24	6·55	.. ...	398	28·38	1	·07
31·16	11·96	24·59	133	16·65	2	·25
31·57	10·16	44·44	402	27·17	.....	.....
27·13	9·74	24·67	17,517	28·98	13	·02
.....	.....	.....	.....	.....	.....	.....
26·27	9·87	19·92	20,409	28·71	22	·03
71·09	9·61	33·57	837	31·02	5	·19
41·61	6·13	28·57	352	21·90	1	·06
31·18	9·05	26·54	9,822	29·60	24	·07
.....	13·08	.....	.....	.....	.....	.....
.....	2·27	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
35·10	8·95	30·61	11,011	29·37	30	·08

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	GUJARAT REGISTRATION DISTRICT—*concld.*			
	AHMEDABAD COLLECTORATE—			
97	Ahmedabad City (Municipal)	270,776	41,657·69	4
98	Dhandhuka Town (Local Fund)... ...	8,056	42,280·00	.....
99	Viramgam do. (do.)... ...	26,262	43,052·46	.....
100	Dholka do. (do.)... ...	12,513	16,684·00	.....
101	Ahmedabad Cantonment	3,232	1,103·07	.....
102	In the 8 Rural Circles (Local Fund) ...	570,073	149·51	12
103	Ahmedabad Central Prison	.....	.....	.....
104	Sabarmati Railway Dispensary	.....	.....	.....
105	Ahmedabad Railway Dispensary ...	.....	.....	.....
	Kankaria do. (do.) ...	.....	.....	.....
	Viramgam do. (do.) ...	.....	.....	.....
	Total ...	890,911	233	16
	INDIAN STATES—			
106	Rewa Kantha Agency	753,058	152	16
107	Mahi Kantha Agency	224,127	138	4
108	Dangs (Local Fund)	24,481	25	1
109	Jambughoda (Local Fund)	9,540	65·20	.....
110	Sadra Dispensary	.....	.....	.....
	TOTAL BY ESTABLISHMENT IN THE GUJARAT REGISTRATION DISTRICT.			
	Municipal	679,523	59,037·62	8
	Local Fund	2,310,315	204·23	46
	Indian States	977,185	148	20
	Cantonment	3,232	1,103·07	.....
	Dispensaries	.....	.....	.....
	Total ...	3,970,055	222	74

No. I—*contd.*

Total number of persons vaccinated.				Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
					Total.	Successful.			Unknown.
						Under one year.	One and under six years.	Total of all ages.	
6				7	8	9	10	11	12
Males.		Females.	Total.						
P.	6,183	5,503	11,686	6,143	11,695	5,816	2,201	9,430	2,231
R.	14,465	4,562	19,027						
P.	164	137	301	.....	301	89	117	274	14
R.	103	39	142						
P.	4,202	3,515	7,717	861	7,718	3,207	3,480	7,078	637
R.	1,170	142	1,312						
P.	72	30	102	364	102	14	12	30	70
R.	155	107	262						
P.	335	2	337	1,400	337	...	2	289	...
R.	1,049	14	1,063						
P.	10,956	9,187	20,143	2,468	20,153	9,126	5,812	17,101	2,952
R.	16,942	4,864	21,806						
P.	1,367	1,232	2,599	4,507	2,600	1,032	1,401	2,490	102
R.	1,020	888	1,908						
P.	129	87	216	886	216	59	130	212	...
R.	532	138	670						
P.	5,534	4,666	10,200	1,101	10,201	4,849	4,349	9,560	634
R.	686	128	814						
.....		1	1	.....	1	...	1	1	...
.....		.....	...						
P.	275	14	289	1,882	289	...	10	259	10
R.	3,432	43	3,475						
P.	7,305	6,000	13,305	1,441	13,307	5,940	5,891	12,532	796
R.	5,670	1,197	6,867						
P.	5,931	5,150	11,081	1,329	11,091	6,639	3,657	10,445	617
R.	749	135	884						
P.	5,931	5,150	11,081	1,329	11,091	6,639	3,657	10,445	617
R.	749	135	884						
P.	37	32	69	.....	69	57	10	67	2
R.	108	10	118						
P.	6,065	5,132	11,197	909	11,197	6,309	4,081	10,695	500
R.	1,619	634	2,253						
P.	6,102	5,164	11,266	909	11,266	6,366	4,091	10,762	502
R.	1,727	694	2,371						
P.	326	260	586	828	586	96	442	561	23
R.	220	22	242						
P.	5,910	5,723	12,633	1,366	12,641	7,541	3,864	11,881	732
R.	1,443	294	1,737						
P.	2	.....	2	.....	2	...	2	2	...
R.	12	.....	12						
P.	7,238	5,983	13,221	1,268	13,229	7,637	4,308	12,444	755
R.	1,675	316	1,991						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	SIND REGISTRATION DISTRICT.					
	KARACHI COLLECTORATE—					
111	Karachi Town (Municipal)	19,027	9	19,010	99·64	52·94
112	Tatta do. (do.)	142	24	14	95·47	18·75
113	In the 11 Rural Circles (Local Fund) ...	1,312	396	336	99·95	40·57
	Medical staff	262	42	214	93·75	87·50
114	Karachi Convict Gang	1,063	241	...	85·76	22·67
	Total ...	21,806	712	19,574	99·42	31·90
	HYDERABAD COLLECTORATE—					
115	Hyderabad Town (Municipal)	1,908	30	1,746	99·68	18·52
116	Do. Cantonment	670	373	176	98·15	75·51
117	In the 7 Rural Circles (Local Fund) ...	814	213	241	99·93	37·17
	Medical staff	...	...	...	100·00	·00
118	Hyderabad Central Prison	3,475	2,596	123	92·83	77·45
	Total ...	6,867	3,212	2,286	99·69	70·12
	NAWABSHAH COLLECTORATE—					
119	In the 7 Rural Circles (Local Fund) ...	885	238	340	99·72	43·67
	Total ...	885	238	340	99·72	43·67
	THAR AND PARKAR COLLECTORATE—					
120	Umarkot Town (Local Fund)	118	35	24	100·00	37·23
121	In the 11 Rural Circles (Local Fund) ...	2,253	615	609	99·98	37·41
	Total ...	2,371	650	633	99·98	37·40
	LARKANA COLLECTORATE—					
122	Larkana Town (Municipal)	242	76	111	99·64	58·02
123	In the 11 Rural Circles (Local Fund) ...	1,737	418	648	99·76	38·42
	Medical staff	12	...	...	100·00	·00
	Total ...	1,991	494	759	99·76	40·10

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
37·02	9·25	91·30	8,450	31·21	159	·59
41·83	6·30	31·52	267	33·14	7	·87
29·85	5·12	40·38	557	21·21	18	·69
74·80	7·36	23·81	380	30·37	.....	.....
.....	.....	.....	.....	.....	.....	.....
28·91	12·02	29·24	15,616	27·39	62	·11
.....	.....	3·45	1,950	.....	.....	.....
.....	.....	.....	50	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
36·26	10·35	65·32	27,270	30·61	246	·28
33·90	6·02	16·92	22,682	30·12	.....	.....
30·01	5·91	12·48	5,457	24·35	.....	.....
28·23	7·33	29·45	898	36·68	.....	.....
32·18	5·26	17·20	263	27·57	.....	.....
.....	3·70	5·04	38	.....	.....	.....
23·83	17·59	57·98	13,230	19·47	429	·63
32·97	11·08	29·01	70,343	30·45	354	·15
33·01	6·00	16·14	28,139	28·80	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	2·02	4·35	2,609	.....	.....	.....
35·96	10·68	52·42	114,321	28·80	783	·20

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	SIND REGISTRATION DISTRICT.			
	KARACHI COLLECTORATE—			
111	Karachi Town (Municipal)	216,883	2,363	5
112	Tatta do. (do.)	8,470	.....	.....
113	In the 11 Rural Circles (Local Fund) ...	316,712	48	11
	Medical staff	.....	.....	.....
114	Karachi Convict Gang	.....	.....	.....
	Total ...	542,065	47	16
	HYDERABAD COLLECTORATE—			
115	Hyderabad Town (Municipal)	73,951	4,167	1
116	Do. Cantonment	7,887		1
117	In the 7 Rural Circles (Local Fund) ...	491,612	.....	10
	Medical staff	.....	.....	.....
118	Hyderabad Central Prison	.....	.....	.....
	Total ...	573,450	128	12
	NAWABSHAH COLLECTORATE—			
119	In the 7 Rural Circles (Local Fund) ...	418,660	107	9
	Total ...	418,660	107	9
	THAR AND PARKAR COLLECTORATE—			
120	Umarkot Town (Local Fund)	4,199	.....	.....
121	In the 11 Rural Circles (Local Fund) ...	392,132	29	15
	Total ...	396,331	29	15
	LARKANA COLLECTORATE—			
122	Larkana Town (Municipal)	17,723	8,023	1
123	In the 11 Rural Circles (Local Fund) ...	580,237	115	11
	Medical staff	.....	.....	.....
	Total ...	597,960	118	12

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 548	464	1,012	1,329	1,015	559	405	976	35
R. 236	81	317						
P. 587	464	1,051	1,098	1,051	730	248	997	54
R. 32	15	47						
P. 135	131	266	289	267	140	122	263	3
R. 9	14	23						
P. 5,406	4,760	10,166	1,349	10,166	7,175	1,962	9,243	919
R. 531	93	624						
P. 189	84	273	...	273	59	92	206	65
R. 2,358	96	2,454						
P. 298	.....	298	692	298	1	...	280	...
R.	.....	...						
P. 7,163	5,903	13,066	1,424	13,070	8,664	2,829	11,965	1,076
R. 4,243	309	4,552						
P. 247	229	476	1,020	476	186	161	363	110
R. 398	146	544						
P. 3,572	3,159	6,731	1,481	6,731	3,891	2,394	6,351	377
R. 517	156	673						
P. 3,819	3,388	7,207	1,406	7,207	4,077	2,555	6,714	487
R. 915	302	1,217						
P. 2,156	1,860	4,016	728	4,016	2,914	874	3,837	175
R. 349	6	355						
P. 2,156	1,860	4,016	728	4,016	2,914	874	3,837	175
R. 349	6	355						
P. 9,594	8,452	18,046	3,674	18,060	8,705	5,107	15,421	2,574
R. 16,591	5,777	22,368						
P. 37,620	32,105	69,725	1,131	69,745	39,611	23,787	65,253	4,416
R. 6,715	1,582	8,297						
P. 2,156	1,860	4,016	728	4,016	2,914	874	3,837	175
R. 349	6	355						
P. 129	87	216	886	216	59	130	212	...
R. 532	138	670						
P. 1,171	131	1,302	1,310	1,302	74	119	1,067	145
R. 8,083	270	8,353						
P. 50,670	42,635	93,305	1,449	93,339	51,363	30,017	85,790	7,310
R. 32,270	7,773	40,043						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	SIND REGISTRATION DISTRICT— *contd.*					
	SUKKUR COLLECTORATE—					
124	Sukkur Town (Municipal)	319	22	33	99·59	7·74
125	Shikarpur do. (do.)	47	6	9	100·00	15·78
126	Rohri do. (do.)	23	4	3	99·62	20·00
127	In the 8 Rural Circles (Local Fund) ...	624	120	245	99·96	31·66
	Medical staff	2,454	50	1,281	99·04	4·26
128	Sukkur Prison	1,087	871	...	93·96	80·13
	Total ...	4,552	1,073	1,571	99·75	35·09
	UPPER SIND FRONTIER—					
129	Jacobabad Town (Municipal)	544	17	55	99·18	4·47
130	In the 5 Rural Circles (Local Fund) ...	637	196	267	99·97	62·97
	Total ...	1,181	230	332	99·91	23·79
	INDIAN STATES—					
131	Khairpur State	355	49	99	99·89	19·14
	Total ...	355	49	99	99·88	19·14
	TOTAL BY ESTABLISHMENT IN THE SIND REGISTRATION DISTRICT—					
	Municipal	22,368	223	21,005	99·58	16·36
	Local Fund	8,298	2,196	2,686	99·88	39·13
	Indian States	355	49	99	99·89	19·14
	Cantonment	670	373	176	98·15	75·56
	Dispensaries	8,353	3,800	1,618	92·22	56·57
	Total ...	40,044	6,641	25,584	99·72	45·92

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
43·52	19·08	99·91	6,826	31·47	55	·25
35·18	4·65	9·86	117	13·81	3	·35
25·59	8·25	25·61	71·03	22·43	78	·25
.....	68·62	81·68	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
32·86	14·65	89·76	14,046	25·91	136	·25
34·08	3·92	91·51	1,918	25·94	80	1·08
74·17	.....	26·27	.....	.....	.....	.....
19·88	6·22	29·67	11,303	22·99	27	·05
.....	.....	.....	.....	.....	.....	.....
.....	3·46	3·54	.....	.....	.....	.....
27·44	5·61	33·29	13,227	23·07	107	·18
25·52	5·56	38·42	11,086	26·48	99	·24
25·52	5·56	38·42	11·086	26·48	99	·24
29·29	2·90	20·34	91	21·70	1	·24
28·84	4·46	27·03	11,366	28·99	89	·23
28·79	4·46	26·69	11,478	28·96	90	·23
35·94	3·92	45·87	463	26·12	5	·28
21·19	5·79	37·31	14,835	25·58	127	·22
.....	·00	·00	.....	.....	.....	.....
21·64	5·71	38·12	15,298	25·75	132	·22

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	SIND REGISTRATION DISTRICT—*contd.*			
	SUKKUR COLLECTORATE—			
124	Sukkur Town (Municipal)	42,759	11,638	1
125	Shikarpur do. (do.)	55,508	5,994	1
126	Rohri do. (do.)	11,378	.....	1
127	In the 8 Rural Circles (Local Fund) ...	400,652	71	8
	Medical Staff	.....	.....	.....
128	Sukkur Prison	.....	.....	.....
	Total ...	510,292	91	11
	UPPER SIND FRONTIER—			
129	Jacobabad Town (Municipal)	10,583	.....	1
130	In the 5 Rural Circles (Local Fund) ...	230,036	86	5
	Total ...	240,619	90	6
	INDIAN STATES—			
131	Khairpur State ...	193,131	.....	6
	Total ...	193,131	.....	6
	TOTAL BY ESTABLISHMENT IN THE SIND REGISTRATION DISTRICT—			
	Municipal	437,250	3,761	11
	Local Fund	2,834,240	61	69
	Indian States	193,131	.....	6
	Cantonment	7,887	.....	.....
	Dispensaries	.....	.....	5 S. A. S.
	Total ...	3,472,508	75	86

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Males.	Females.	Total.						
P. 27,011	6,843	33,854	17,237	33,854	614	1,852	2,466	31,388
R. 52,330	.....	52,330						
Males.	Females.	Total.						
P. 85,889	62,420	148,309	6,907	148,528	68,594	29,774	102,083	45,774
R. 200,712	72,265	272,977						
P. 260,791	247,034	507,825	1,974	507,869	324,726	120,378	452,710	54,456
R. 135,677	35,610	171,287						
P. 1,665	1,428	3,093	7,465	3,093	1,829	849	2,733	326
R. 12,342	6,959	19,301						
P. 21,409	20,262	41,671	1,589	41,672	32,298	6,641	39,305	2,307
R. 5,982	1,615	7,597						
P. 1,973	818	2,791	2,149	2,791	784	688	2,457	174
R. 17,197	1,505	18,702						
P. 350,318	311,700	662,018	2,738	662,231	395,933	151,689	559,988	100,730
R. 365,928	116,339	482,267						
P. 21,409	20,262	41,671	1,589	41,672	32,298	6,641	39,305	2,307
R. 5,982	1,615	7,597						
P. 371,727	331,962	703,689	2,658	703,953	428,231	158,330	599,288	103,037
R. 371,910	117,954	489,864						

mary

Average number of persons vaccinated by each Vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Average cost of each successful case.
Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under six years.			
438	2,670	427,447	157,642	33·60	Rs. a. p. ...	Rs. a. p. ...
1 S.A.S.						
10 S.A.S.	2,149	784	688	...	...	...
...	...	...	...	...	...	...
438	2,658	428,231	158,330	33·60	6,65,858 15 1	0 15 6
11 S.A.S.						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	ADEN—*contd.*					
132	Aden (Municipal)	52,330	1,391	50,939	100·00	100·00
	TOTAL BY ESTABLISHMENTS.					
	Municipal	273,037	27,114	232,427	99·35	66·77
	Local Fund	171,308	54,745	64,681	99·85	51·34
	Cantonments	19,301	2,593	14,814	98·78	57·79
	Indian States	7,597	2,223	1,476	99·84	36·35
	Dispensaries	18,702	11,286	1,918	93·89	67·24
	In the British Territory-...	482,348	95,738	313,840	99·72	56·82
	In the Indian States	7,597	2,223	1,476	99·84	36·35
	Grand Total ...	489,945	96,961	315,316	99·73	56·12

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
23·34	3·44	10·41	1,030	24·09	10	·23
18·07	5·13	21·43	1,448	26·09	40	·72
23·47	1·12	13·04	280	24·61	2	·18
23·36	9·04	39·26	12,484	31·16	47	·12
.....	23·81	52·20	.....	.....	.....	.....
.....	·00	·00	.....	.....	.....	.....
25·55	8·23	34·53	15,156	29·71	98	·19
35·90	23·11	10·11	327	30·90	7	·66
28·46	5·60	41·97	7,562	32·00	10	·04
28·78	6·76	26·45	7,889	32·79	16	·07
20·12	4·35	27·89	5,215	27·00	...	...
20·12	4·35	27·89	5,215	27·00	...	...
35·78	14·25	93·91	12,373	28·07	217	·50
23·09	6·33	32·37	75,806	26·74	497	·18
20·12	4·35	27·89	5,215	27·00	.....	.....
7·42	.....	26·27	.....	.....	.....	.....
.....	11·14	19·37	.....	.....	.....	.....
26·65	7·83	53·88	93,395	26·90	715	·26

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population *per* square mile.	Average number of vaccinators employed throughout the year.
1	2	3	4	5
	ADEN.			
132	Aden (Municipal)	54,425	686	5
	TOTAL BY ESTABLISHMENTS.			
	Municipal	3,347,080	...	61
	Local Fund	15,995,425	129	344
	Cantonments	95,759	1 S.A.S. ...	2
	Indian States	1,314,397	...	31
	Dispensaries	...	S.A.S. ...	10
	In the British Territory	19,438,264	...	407 11 S.A.S.
	In the Indian States	1,314,397	...	31
	Grand Total ...	20,752,661	...	438 11 S.A.S.

Sum

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
By Special Staff (Statement I).	700,898	471,162	701,162	471,243	99·75	54·91
By Dispensary Staff (Statement III) ...	2,791	18,702	2,791	18,702	93·89	67·24
By other Agencies, if any ...	...	...	...	...	...	...
Total ...	703,689	489,864	703,953	489,945	99·73	56·12

No. 1—*concld.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
70·87	92·72	97·34	2,269	41·69	55	1·01
38·60	30·82	85·13	81,199	24·26	1,764	0·53
31·73	10·72	37·75	463,785	29·00	2,358	0·19
55·64	40·54	76·75	2,142	22·37	10	0·10
31·59	5·54	19·43	39,084	29·73	...	...
...	6·23	10·26	5,594	...	...	...
33·72	15·21	65·07	549,529	28·27	4,622	0·24
31·59	5·54	19·43	39,084	29·73	...	...
33·60	14·63	64·36	588,614	28·36	4,622	0·23

STATEMENT

Showing the Cost of the Department in the

No.	Circles and Districts.	Expen			
		European Supervising Officers.	Pay.	Inspectors of Sanitation and Vaccination.	Pay.
	WESTERN REGISTRATION DISTRICT.		Rs. a. p.		Rs. a. p.
	Administrative Charges ...	1	6,832 14 0	8/	7,832 11 0
1	East Khandesh Collectorate ...	...	.....	.....	.....
2	West Khandesh do. ...	...	.....	.....	.....
3	Nasik do. ...	...	.....	.....	.....
4	Thana do. ...	...	.....	.....	.....
5	Bombay Suburban do. ...	...	.....	.....	.....
6	Kolaba do. ...	...	.....	.....	.....
	Total ...	1	6,832 14 0	8	7,832 11 0
7	Bombay City	1	4,180 0 0	1	1,727 13 0
	CENTRAL REGISTRATION DISTRICT.				
	Administrative Charges ...	1	12,273 4 0	6	8,149 13 0
8	Ahmednagar Collectorate ...	...	.....	.....	.....
9	Poona do. ...	...	.....	.....	.....
10	Sholapur do. ...	...	.....	.....	.....
11	Satara do. ...	...	.....	.....	.....
12	Ratnagiri do. ...	...	.....	.....	.....
	Total ...	1	12,273 4 0	6	8,149 13 0
	SOUTHERN REGISTRATION DISTRICT.				
	Administrative Charges ...	1	11,199 12 0	7	10,156 0 0
13	Belgaum Collectorate	...	.....	.....	.....
14	Dharwar do.	...	.....	.....	.....
15	Bijapur do.	...	.....	.....	.....
16	Kanara do.	...	.....	.....	.....
	Total ...	1	11,199 12 0	7	10,156 0 0

No. II.

Bombay Presidency during the year 1929-30.

DITURE.

Vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total Pay of Establishment.
	Rs. a. p.		Rs. a. p.		Rs. a. p.	Rs. a. p.
.....	.....	2	3,360 0 0	12	2,146 7 0	20,172 0 0
23	9,860 3 0	.....	.....	20	3,574 7 0	13,434 10 0
16	8,322 6 0	.....	.....	15	2,920 7 0	11,242 13 0
22	9,660 3 0	.....	.....	20	3,221 9 0	12,881 12 0
22	9,863 9 0	.....	.....	20	3,578 9 0	13,442 2 0
4	2,458 2 0	.....	.....	4	941 9 0	3,399 11 0
17	6,183 4 0	.....	.....	16	2,531 4 0	8,714 8 0
103	46,347 11 0	2	3,360 0 0	107	18,914 4 0	83,287 8 0
9	10,902 9 0	6	10,534 9 0	28	10,757 9 0	38,102 8 0
.....	.....	2	1,925 0 0	10	1,896 0 0	24,244 1 0
19	8,618 13 0	.....	.....	19	2,921 2 0	11,539 15 0
20	10,095 14 0	.....	.....	21	4,099 9 0	14,195 7 0
16	7,459 12 9	.....	.....	15	2,724 12 6	10,184 9 3
22	10,029 9 0	.....	.....	20	3,334 14 6	13,364 7 6
22	9,728 5 0	.....	.....	21	3,773 11 0	13,502 0 0
99	45,932 5 9	2	1,925 0 0	106	18,750 1 0	87,030 7 9
.....	.....	1	1,307 12 0	10	1,758 9 0	24,432 1 0
18	8,494 15 0	.....	.....	18	2,972 11 0	11,467 10 0
23	10,870 15 0	.....	.....	23	3,856 1 0	14,727 0 0
20	8,353 5 9	.....	.....	20	2,860 0 0	11,213 5 9
16	7,360 3 0	.....	.....	16	2,664 5 0	10,024 8 0
77	35,079 6 9	1	1,307 12 0	87	14,111 10 0	71,854 8 9

STATEMENT

EXPENDITURE—*contd.*

No.	Circles and Districts.	Travelling Allowances.	Contingencies.	Total Cost.	Imperial Funds
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	WESTERN REGISTRATION DISTRICT.				
	Administrative Charges ...	7,994 6 0	966 15 0	29,133 5 0	.....
1	East Khandesh Collectorate ...	5,278 5 0	1,164 0 9	19,876 15 9	.....
2	West Khandesh do. ...	4,397 7 0	761 8 4	16,401 12 4	.....
3	Nasik do. ...	4,674 8 0	1 092 2 0	18,648 6 0	.....
4	Thana do. ...	4,867 8 0	1,092 2 10	19,399 12 10	.....
5	Bombay Suburban do. ...	553 8 0	216 10 10	4,169 13 10	.....
6	Kolaba do. ...	3,731 12 0	809 14 10	13,253 2 10	.....
	Total ...	31,497 6 0	6,093 6 7	1,20,883 4 7	.....
7	Bombay City	1,450 6 0	14,124 1 4	53,676 15 4	.....
	CENTRAL REGISTRATION DISTRICT.				
	Administrative Charges ...	8,827 8 0	1,841 0 0	31,912 9 0	.....
8	Ahmednagar Collectorate ...	4,656 9 0	835 4 9	17,031 12 9	.....
9	Poona do. ...	4,179 14 0	1,928 14 8	20,304 3 8	.....
10	Sholapur do. ...	3,501 8 6	738 9 3	14,424 11 0	.....
11	Satara do. ...	5,326 2 0	463 2 0	19,153 11 6	...
12	Ratnagiri do. ...	3,330 12 0	362 5 0	17,195 1 0	.....
	Total ...	29,822 5 6	6,169 3 8	1,23,022 0 11	.....
	SOUTHERN REGISTRATION DISTRICT.				
	Administrative Charges ...	7,884 1 0	1,421 7 0	33,727 9 0	.....
13	Belgaum Collectorate	5,195 4 0	808 2 5	17,471 0 5	.....
14	Dharwar do.	6,196 14 0	918 7 6	21,842 5 6	.....
15	Bijapur do.	4,836 0 11	1,091 14 3	17,141 4 11	.....
16	Kanara do.	2,055 0 0	827 2 7	12,906 10 7	.....
	Total ...	26,167 3 11	5,067 1 9	1,03,088 14 5	.....

No. II—*contd.*

Paid from						
Provincial Funds.	Local Funds.	Municipalities.	Indian States.	Total.	Number of all successful Vaccinations and Re-Vaccinations.	Average cost of each successful case.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
29,133 5 0	.....	.....	.....	29,133 5 0	...	.....
4,427 6 0	12,768 8 2	2,681 1 7	.....	19,876 15 9	33,168	0 9 7
854 0 0	12,943 0 0	1,914 14 0	689 14 4	16,401 12 4	23,695	0 11 1
4,102 9 0	12,798 9 3	1,747 3 9	.....	18,648 6 0	25,265	0 11 9
3,426 0 0	13,907 10 3	1,394 7 7	671 11 0	19,399 12 10	25,489	0 12 2
384 0 0	1,706 6 10	2,079 7 0	.....	4,169 13 10	8,957	0 7 5
2,975 7 0	9,022 0 10	.....	1,255 9 0	13,253 2 10	19,780	0 10 8
45,302 13 0	63,146 3 4	9,817 1 11	2,617 2 4	1,20,883 4 7	136,354	0 14 2
.....	.....	53,676 15 4	.....	53,676 15 4	23,338	2 4 10
34,912 9 0	.....	.....	.....	34,912 9 0	...	.....
3,207 15 0	12,529 6 9	1,294 7 0	.....	17,031 12 9	32,210	0 8 6
2,639 11 0	12,063 15 9	5,600 8 11	.....	20,304 3 8	43,048	0 7 7
1,093 10 0	9,983 4 6	3,347 12 6	.....	14,424 11 0	36,689	0 6 3
3,693 12 0	14,868 4 3	591 11 3	.....	19,153 11 6	35,609	0 8 7
3,213 14 0	13,981 3 0	.....	.....	17,195 1 0	37,308	0 7 4
48,761 7 0	63,425 2 3	10,834 7 8	.....	1,23,022 0 11	184,864	0 10 8
33,642 9 0	.....	.....	85 0 0	33,727 9 0	...	.....
2,267 8 0	14,264 15 5	938 9 0	.....	17,471 0 5	36,403	0 6 4
2,891 10 0	16,041 4 6	2,421 15 0	487 8 0	21,842 5 6	38,052	0 9 2
1,440 0 0	13,893 15 3	981 12 9	825 8 11	17,141 4 11	39,244	0 6 11
3,158 6 0	8,990 15 7	757 5 0	.. ...	12,906 10 7	13,138	0 15 9
43,400 1 0	53,191 2 9	5,099 9 9	1,398 0 11	1,03,088 14 5	126,837	0 13 0

STATEMENT

EXPEN

No.	Circles and Districts.	Supervising Officers.	Pay.	Inspectors of Sanitation and Vaccination.	Pay.
	GUJARAT REGISTRATION DISTRICT.		Rs. a. p.		Rs. a. p.
	Administrative Charges ...	1	3,181 14 0	5	6,537 2 0
17	Surat Collectorate	...	.....	.....	.....
18	Broach do.	...	...	.....	.....
19	Kaira do.	...	.....	.....	.....
20	Panch Mahals Collectorate ...	...	.....	.....	.....
21	Ahmedabad do. ...	...	.....	1	.....
22	Mahi Kantha Agency	...	.....	1	720 0 0
23	Rewa Kantha do.	...	.....	.....	.....
	Total ...	1	3,181 14 0	7	7,257 2 0
	SIND REGISTRATION DISTRICT.				
	Administrative Charges ...	1	13,576 11 0	7	6,996 10 0
24	Karachi Collectorate	...	.....	.....	.....
25	Hyderabad do.	...	.....	.....	.....
26	Nawabshah do.	...	.....	.....	.....
27	Thar and Parkar do.	...	.....	.....	.....
28	Larkana do.	...	.....	.....	.....
29	Sukkur do.	...	.....	.....	.....
30	Jacobabad do.	...	.....	.....	.....
31	Khairpur Indian State	...	.....	.....	.....
	Total ...	1	13,576 11 0	7	6,996 10 0
	VACCINE INSTITUTE.				
32	Belgaum	1	16,284 11 0	3	6,129 7 0
33	Aden	...	.....	.....	.....
	TOTAL OF PRESIDENCY		67,529 2 0	.....	48,249 8 0

No. II—*contd.*

DITURE.

Vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total Pay of Establishment.
	Rs. a. p.		Rs. a. p.		Rs. a. p.	Rs. a. p.
.....	.....	2	3,379 11 0	9	1,602 4 0	14,700 15 0
15	7,309 8 0	.....	.....	14	2,479 1 0	9,788 9 0
7	3,269 11 0	.....	.....	6	1,032 1 0	4,301 12 0
12	5,365 12 0	.....	.....	11	1,964 8 0	7,330 4 0
8	3,483 11 0	.....	.....	7	1,260 0 0	4,743 11 0
18	8,784 2 0	1	404 0 0	18	3,222 15 0	12,411 1 0
4	1,463 14 0	.....	.....	5	893 4 0	3,077 2 0
17	4,803 13 3	.....	.....	16	2,123 1 7	6,926 14 10
81	34,480 7 3	3	3,783 11 0	86	14,577 2 7	63,280 4 10
.....	.....	3	4,205 2 0	10	1,911 0 0	26,689 7 0
17	9,063 13 0	1	1,375 0 0	16	4,180 12 0	14,619 9 0
14	8,002 10 0	.....	.....	12	2,821 0 0	10,823 10 0
10	5,047 2 0	.....	.....	10	1,978 0 0	7,025 2 0
16	7,002 3 0	.....	.....	16	3,649 15 0	10,652 2 0
13	6,156 13 0	.....	.....	13	2,707 14 0	8,864 11 0
12	5,257 2 0	.....	.....	13	2,573 9 0	7,830 11 0
7	3,057 3 0	.....	.....	7	1,510 2 0	4,567 5 0
6	2,657 15 0	.....	.....	6	864 0 0	3,521 15 0
95	46,244 13 0	4	5,580 2 0	103	22,196 4 0	94,594 8 0
9	8,188 15 0	3	2,726 13 0	22	4,375 7 0	37,705 5 0
.....	.....	.....	.....	.....	.....	.....
.....	2,27,176 3 9	.....	29,217 15 0	.....	1,03,682 5 7	4,75,855 2 4

STATEMENT

EXPENDITURE—*contd.*

No.	Circles and Districts.	Travelling Allowances.	Contingencies.	Total Cost.	Imperial Funds.
	GUJARAT REGISTRATION DISTRICT.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Administrative Charges ...	5,454 10 0	1,921 10 9	22,077 3 9	.....
17	Surat Collectorate	3,327 4 0	1,072 8 3	14,088 5 3	.....
18	Broach do.	1,304 6 0	244 7 3	5,850 9 3	.....
19	Kaira do.	2,445 2 0	331 9 5	10,106 15 5	.....
20	Panch Mahals do.	1,697 6 0	237 0 4	6,678 1 4	.....
21	Ahmedabad do.	2,927 12 6	1,618 2 0	16,956 15 6	.....
22	Mahi Kantha Agency	1,024 5 0	349 8 4	4,450 15 4	.....
23	Rewa Kantha do.	1,513 1 10	375 2 3	8,815 2 11	.....
	Total ...	19,593 15 4	6,150 0 7	89,024 4 9	.....
	SIND REGISTRATION DISTRICT.				
	Administrative Charges ...	8,250 1 0	3,138 8 5	38,078 0 5	.....
24	Karachi Collectorate	4,690 13 0	691 1 7	20,091 7 7	.....
25	Hyderabad do.	3,172 0 0	323 6 11	14,319 0 11	.....
26	Nawabshah do.	2,464 13 0	365 7 4	9,855 6 4	.....
27	Thar and Parkar Collectorate ...	4,058 11 0	498 11 4	15,209 8 4	.....
28	Larkana do. ...	2,915 10 0	377 13 0	12,158 2 0	.....
29	Sukkur do. ...	2,887 9 0	725 4 0	11,443 8 0	.....
30	Jacobabad do. ...	1,422 8 0	173 5 0	6,163 2 0	.....
31	Khairpur Indian State	1,400 0 0	508 7 11	5,430 6 11	.....
	Total ...	31,262 1 0	6,802 1 6	1,32,658 10 6	.....
	VACCINE INSTITUTE.				
32	Belgaum	1,142 11 0	44,346 14 10	*37,367 3 7	.....
33	Aden	.....	.....	6,137 9 0	.....
	TOTAL OF PRESIDENCY ...	140,936 0 9	88,457 14 3	6,65,858 15 1	.....

	Rs. a. p.
*Total expenditure ...	83,194 14 10
Deduct—Sale-proceeds ...	45,827 11 3
	37,367 3 7

No. II—*concld.*

Paid from				Total.	Number of all successful Vaccinations and Re-Vaccinations.	Average cost of each successful case.
Provincial Funds.	Local Funds.	Municipality.	Indian States.			
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
22,077 3 9	.....	.....	.....	22,077 3 9	...	.....
2,760 2 0	8,459 12 3	2,368 7 0	.....	14,088 5 3	20,664	0 10 11
1,127 9 0	4,012 12 8	710 3 7	.....	5,850 9 3	9,154	0 10 3
1,538 9 0	7,765 2 1	803 4 4	.....	10,106 15 5	20,250	0 8 0
1,227 1 0	5,152 0 4	299 0 0	.....	6,678 1 4	13,727	0 7 9
2,614 9 0	8,515 14 3	5,826 8 3	.....	16,956 15 6	28,562	0 9 6
.....	.....	.....	4,450 15 4	4,450 15 4	6,725	0 10 7
.....	.....	.....	8,815 2 11	8,815 2 11	25,528	0 5 6
31,345 1 9	34,405 9 7	10,007 7 2	13,266 2 3	89,024 4 9	124,610	0 11 5
38,078 0 5	.....	.....	.....	38,078 0 5	...	.....
1,773 2 0	10,143 11 6	8,084 10 1	.....	20,001 7 7	17,211	1 2 7
1,295 9 0	9,633 5 11	3,390 2 0	.....	14,319 0 11	12,878	1 1 9
1,357 12 0	8,497 10 4	.....	.....	9,855 6 4	10,683	0 14 9
2,086 0 0	13,123 8 4	.....	.....	15,209 8 4	11,412	1 5 4
1,881 11 0	9,430 7 0	846 0 0	.....	12,158 2 0	12,936	0 14 11
550 15 0	7,859 1 6	3,033 7 6	.....	11,443 8 0	11,631	0 15 8
988 15 0	4,473 3 0	701 0 0	.....	6,163 2 0	6,927	0 14 11
.....	.....	.....	5,430 6 11	5,430 6 11	3,886	1 6 4
48,012 0 5	63,160 15 7	16,055 3 7	5,430 2 11	1,32,658 10 6	87,564	1 8 3
37,367 3 7	.....	.....	.....	37,367 3 7	...	.....
.....	.....	.....	.....	6,137 9 0	3,857	1 9 5
2,54,188 10 9	2,77,330 1 6	105,490 13 5	22,711 12 5	6,65,858 15 1	687,424	0 15 5

STATEMENT

Comparative Statement showing the number of persons successfully vaccinated in each

Establishment.	PERSONS PRIMARILY			
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	YEARS ENDED			
	1920-1921.		1921-1922.	
Municipal	71,503	62,806	80,258	69,818
Local Fund	435,433	392,041	455,216	413,165
Cantonment	1,548	1,280	1,914	1,588
Indian States	81,719	79,613	39,425	36,989
Dispensaries	473	444	877	729
Total ...	590,676	536,184	577,690	522,289

Establishment.	PERSONS PRIMARILY			
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	YEARS ENDED			
	1925-1926.		1926-1927.	
Municipal	88,184	73,984	114,209	77,609
Local Fund	504,178	452,368	504,987	449,588
Cantonment	1,720	1,125	2,213	1,902
Indian States	42,194	39,126	40,941	38,106
Dispensaries	929	542	773	514
Total ...	632,205	567,145	663,123	567,669

No. IV.

primarily vaccinated and the number of those persons who were of the under mentioned official years.

VACCINATED.

Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
ON 31ST MARCH.					
1922-1923.		1923-1924.		1924-1925.	
80,048	70,658	85,903	75,966	85,254	76,025
466,085	422,766	486,311	441,967	484,794	436,886
1,421	1,280	2,366	2,187	1,291	1,097
39,403	37,019	41,078	38,267	40,731	38,353
780	685	662	479	813	596
587,737	532,408	616,320	558,866	612,883	552,957

VACCINATED—*continued.*

Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
ON 31ST MARCH—*continued.*					
1927-1928.		1928-1929.		1929-1930.	
100,264	77,224	97,310	79,338	148,528	102,088
508,298	451,750	509,413	453,556	507,869	452,710
1,954	1,663	2,055	1,737	3,099	2,733
39,795	36,465	42,807	40,050	41,672	39,305
808	609	1,348	1,229	2,791	2,457
651,119	567,711	652,933	575,910	703,963	599,288

STATEMENT

Showing Particulars of Vaccination

District.		Total number of persons vaccinated.		Total number inspected. By Assistant Directors of Public Health or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.	
		Primary.	Re-vaccinations	Primary.	Re-vaccinations	Primary.	Re-vaccinations
Western Registration District.	East Khandesh ...	40,801	9,728	1,394	...	11,158	178
	West Khandesh ...	25,066	8,873	550	...	13,092	245
	Nasik ...	30,109	6,858	2,354	...	11,729	331
	Thana ...	26,572	3,966	...	...	11,361	44
	Bombay Suburban ...	5,498	6,131	...	...	1,063	...
	Kolaba ...	20,762	2,465	...	...	8,109	100
	Bombay City ...	26,387	88,863	4,091	...	3,804	...
Central Registration District.	Ahmednagar ...	28,600	9,535	136	...	8,448	...
	Poona ...	26,310	68,276	436	...	1,957	...
	Sholapur ...	29,138	14,157	54	35	6,994	217
	Satara ...	33,991	33,170	399	...	6,072	...
	Ratnagiri ...	35,931	5,509	143	...	12,553	28
Southern Registration District.	Belgaum ...	31,797	23,352	2,516	...	7,525	459
	Dharwar ...	31,814	31,810	1,504	...	4,896	572
	Bijapur ...	28,239	27,130	1,807	1	7,334	268
	Kanara ...	10,452	6,101	1,093	133	2,934	576
Gujarat Registration District.	Surat ...	23,109	6,382	5	...	7,241	354
	Broach ...	10,471	1,244	117	1	2,198	27
	Kaira ...	21,646	3,370	1,357	105	5,756	166
	Panch Mahals ...	13,445	1,900	969	348	3,321	708
	Ahmedabad ...	30,417	21,401	596	139	12,209	655
Sind Registration District.	Karachi ...	19,704	20,481	55	...	2,146	201
	Hyderabad ...	13,015	3,392	...	...	3,180	58
	Nawabshah ...	11,081	884	...	...	2,567	85
	Thar and Parkar ...	14,266	2,371	...	...	2,374	329
	Larkana ...	13,219	1,979	...	...	3,141	245
	Sukkur ...	12,495	1,011	...	...	5,054	91
	Upper Sind Frontier ...	7,207	1,217	42	1	530	3
	Total for the Province ...	618,542	411,553	19,618	763	168,741	5,835

No. V.

verified by Inspecting Officers in 1929-30.

Percentage of Inspections to total number vaccinated.				Percentage of cases found successful of total number inspected.				Percentage of success reported by Vaccinators.	
By Assistant Directors of Public Health or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.		By Assistant Directors of Public Health or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.			
Primary.	Re-vaccinations.	Primary.	Re-vaccinations	Primary.	Re-vaccinations	Primary.	Re-vaccinations	Primary.	Re-vaccinations.
3·41	...	27·10	1·83	96·92	...	98·41	24·72	5·28	...
1·77	...	52·23	2·76	92·18	...	96·84	61·22	4·76	...
7·82	...	38·95	4·83	98·47	...	98·24	65·56	18·48	...
...	...	42·75	1·11	...	...	99·67	65·91	...	...
...	...	19·83	...	...	...	99·90	...	...	...
...	...	39·06	40·57	...	...	98·98	55·00	...	...
16·00	...	14·00	...	100·00	...	100·00	...	99·00	...
0·48	...	29·52	...	100·00	...	99·03	...	91·69	62·77
1·20	...	5·30	...	99·08	...	98·92	...	91·51	14·39
0·18	0·15	24·00	1·53	100·00	100·00	99·13	46·54	89·54	74·86
1·17	...	17·36	...	96·75	...	99·08	...	87·22	17·98
0·40	...	34·94	0·51	100·00	...	99·93	92·84	94·49	60·90
7·91	...	23·67	1·97	99·52	...	99·43	10·89	93·24	28·93
4·73	...	15·39	1·80	99·73	...	99·49	32·17	95·92	19·01
6·40	0·04	25·97	0·97	99·56	100·00	99·69	40·30	97·90	33·80
10·46	2·18	28·07	9·44	99·73	50·38	99·28	39·76	97·75	47·55
0·02	...	31·38	5·55	100·00	·00	99·20	19·49	80·24	17·55
1·41	0·08	20·99	2·48	100·00	·00	99·68	62·98	85·42	16·92
6·27	3·12	26·59	4·93	99·71	45·71	99·78	40·36	89·80	24·12
7·21	18·32	24·70	37·26	99·79	48·28	99·49	65·11	90·81	38·11
1·95	0·65	40·13	3·06	98·99	45·32	98·76	27·48	88·61	7·52
·28	...	10·89	·98	100·00	...	98·98	22·39	84·90	3·27
...	...	24·43	1·71	...	...	99·69	41·38	94·11	46·77
...	...	23·17	9·62	...	...	99·80	20·10	94·26	26·92
...	...	21·07	13·88	...	...	99·37	32·52	95·53	27·41
...	...	23·76	12·38	...	...	97·01	16·73	94·12	24·81
...	...	40·45	9·00	...	...	99·72	35·16	91·57	19·68
·58	0·08	7·35	·25	100·00	100·00	100·00	66·67	93·16	17·50
3·17	0·18	27·28	1·44	99·15	50·19	97·08	34·05	...	...

APPENDIX

STATEMENT

Showing the Particulars of Vaccination in

Number.	Circles and Districts.	Population of District according to Census of 1921.	Average Population per square mile.	Average Number of Vaccinators employed throughout the year.
1	2	3	4	5
1	Idar	202,811	64	6
2	Cambay	71,679	207	2
3	Aundh (Pant Pratinidhi)	64,560	...	2
4	Akalkot	81,250	...	2
5	Bhor (Pant Sachiv)	130,420	...	3
6	Phaltan	43,286	...	1
7	Sávantwádi	206,440	...	6
8	Sangli State	221,321	199	6
9	Jamkhandi State	101,195	193	4
10	Miraj Senior State	82,580	241	2
11	Miraj Junior State	34,665	164	1
12	Kurundwad State (Senior)	38,760	210	1
13	Kurundwad State (Junior)	34,296	296	1
14	Mudhol	60,140	167	1
15	Ramdurg	33,997	205	1
16	Kolhápur	833,726	2,590	13
17	Janjira	87,534	270	2
18	Bansda	40,125	187	1
	Grand Total ...	2,368,785	...	55

V.

No. I.

Indian States during the year 1929-30.

Total Number of Persons vaccinated.			Average Number of persons vaccinated by each Vaccinator.	Primary Vaccination.			
				Total.	Successful.		
					Under one year.	One and under six years.	Total of all ages.
6			7	8	9	10	11
Males.	Females.	Total.					
P. 4,924	4,431	9,355	1,718	9,355	6,487	2,838	9,325
R. 802	153	955					
P. 1,364	1,312	2,676	1,388	2,676	2,148	481	2,644
R. 101	...	101					
P. 1,260	1,212	2,472	2,580	2,472	1,527	693	2,236
R. 1,944	644	2,588					
P. 1,581	1,392	2,973	1,696	2,973	2,164	641	2,894
R. 331	88	419					
P. 2,050	2,018	4,068	1,864	4,068	2,766	949	3,756
R. 1,087	438	1,525					
P. 577	509	1,086	1,509	1,086	900	174	1,086
R. 299	124	423					
P. 3,299	3,215	6,514	1,177	6,514	4,684	1,855	6,512
R. 327	224	551					
P. 4,022	3,853	7,875	1,591	7,875	6,334	1,448	7,861
R. 1,451	220	1,671					
P. 2,061	1,961	4,022	2,021	4,022	3,037	797	4,022
R. 2,812	1,250	4,062					
P. 2,128	1,756	3,884	2,031	3,884	3,314	523	3,861
R. 123	54	177					
P. 455	450	905	1,299	905	621	262	905
R. 275	119	394					
P. 664	668	1,332	2,985	1,332	1,103	158	1,267
R. 1,425	228	1,653					
P. 613	612	1,225	1,765	1,225	933	261	1,209
R. 493	47	540					
P. 906	802	1,708	2,965	1,708	1,418	258	1,695
R. 1,000	257	1,257					
P. 653	555	1,208	1,593	1,208	1,028	180	1,208
R. 361	24	385					
P. 14,400	13,855	28,255	2,788	28,255	24,880	2,466	27,497
R. 5,394	2,594	7,988					
P. 1,221	1,238	2,459	1,355	2,459	1,291	1,073	2,434
R. 158	93	251					
P. 1,032	838	1,870	1,870	1,870	477	555	1,032
R. 381	...	381					
P 43,210	40,677	83,887	1,985	83,887	65,062	15,612	81,444
R. 18,764	6,557	25,321					

APPENDIX

STATEMENT

Number.	Circles and Districts.	PRIMARY VACCINATION —*contd.*	RE-VACCINATION.			Percentage successful which were
		Unknown.	Total.	Successful.	Unknown.	Primary.
1	2	12	13	14	15	16
1	Idar	30	955	788	104	99·06
2	Cambay	27	101	84	12	98·01
3	Aundh (Pant Pratinidhi)	217	2,580	803	357	99·15
4	Akalkot	79	419	383	34	100·00
5	Bhor (Pant Sachiv)	306	1,526	717	217	99·84
6	Phaltan	...	423	416	...	100·00
7	Sawantwadi	...	551	435	11	99·97
8	Sangli State	8	1,671	1,026	9	99·91
9	Jamkhandi State	...	4,062	3,652	78	100·00
10	Miraj Senior State	19	177	98	6	99·90
11	Miraj Junior State	...	394	394	...	100·00
12	Kurundwad State (Senior)	65	1,653	502	383	100·09
13	Kurundwad State (Junior)	11	540	316	...	99·59
14	Mudhol	13	1,257	324	211	100·00
15	Ramdurg	...	385	289	43	100·00
16	Kolhápur	746	7,988	6,020	1,900	99·96
17	Janjira	22	251	250	1	99·87
18	Bansda	848	381	317	64	100·00
	Grand Total ...	2,391	25,314	16,814	3,430	99·93

V—*concld.*

No. I—*concld.*

tage of successful cases in the results known.	Persons successfully vaccinated per 1,000 of Population.	Percentage of unknown cases to total cases.		Average annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
Re-vaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
17	18	19	20	21	22	23	24
82·05	44·06	0·30	1·02	8,976	39·06	300	1·32
8·03	37·03	1·08	...	2,392	81·08	...	...
35·99	47·07	8·78	13·79	1,775	27·49	...	...
78·70	40·33	2·66	8·11	2,836	34·90	...	...
54·82	34·37	7·52	14·22	3,321	25·46	...	...
98·34	25·46	...	...	1,876	43·34	...	...
80·56	32·66	...	2·00	6,650	23·22	...	...
61·73	40·11	0·10	0·54	7,988	36·09	...	...
91·67	75·93	...	1·92	3,743	36·99	...	...
57·31	47·94	0·49	3·39	3,757	45·22	...	...
100·00	37·47	...	...	1,154	33·29	...	...
39·53	45·64	23·17	23·17	1,502	38·75	...	...
58·52	35·75	...	...	1,376	40·12	...	...
30·98	33·57	16·78	16·78	1,900	31·59	...	...
84·50	44·03	11·17	11·17	1,400	41·18	...	...
98·88	40·20	2·64	23·79	29,600	35·51	...	...
100·00	30·66	0·89	0·40	2,174	24·83	...	...
...	16·14	3·62	...	976	...	...	...
76·81	41·48	2·85	13·55	83,396	35·64	...	...

STATEMENT No. I—*concld.*

Summary

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
By Special Staff (Statement I)	83,887	25,321	83,887	25,321	99·93	76·81

	Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Average cost of each successful case.
	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under six years.			
						Rs. a. p.	Rs. a. p.
By Special Staff (Statement I).	55	1,985	65,062	15,612	41·46	.....	...

STATEMENT II

STATEMENT

Showing the Cost of the Department in

No.	Circles and Districts.	European Supervising Officers.	Pay.	Inspectors of Sanitation and Vaccination.	Pay.	Vaccinators.	Pay.	Clerks.	Pay.
			Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.
1	Idar State ...	...	...	1	360 0 0	6	1,224 0 0	...	...
2	Cambay ...	...	...	2	2,580 0 0	2	690 0 0	...	...
3	Akalkot ...	...	...	1	480 0 0	2	596 0 0	...	...
4	Phaltan ...	...	...	...	...	1	240 0 0	...	...
5	Bhor ...	...	...	1	432 0 0	4	932 4 5	...	...
6	Sawantwadi ...	...	...	1	720 0 0	6	1,648 0 0	...	...
7	Aundh (Pant Pratinidhi).	...	...	...	120 0 0	2	624 0 0	...	...
8	Kolhapur State ...	...	...	1	600 0 0	13	3,720 0 0	1	360 0 0
9	S. M. Country States.	...	...	8	2,788 0 0	17	4,045 14 6	1	184 10 4
10	Janjira ...	...	...	...	...	1	732 0 0	...	...
11	Bansda ...	...	...	1	...	1	132 0 0	...	...
	Total ...	...	...	16	8,080 0 0	55	14,584 2 11	2	544 10 4

Expend

No. II

the Indian States during the year 1929-30

iture.					Paid from	
Peons, etc.	Pay.	Total Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Imperial Funds.	Provincial Funds.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
7	670 9 0	2,254 9 0	480 0 0	747 0 0	3,481 9 0	...	...
2	282 0 0	3,552 0 0	205 5 0	348 9 6	4,105 14 6	...	...
3	394 5 0	1,470 5 0	396 8 0	96 13 3	1,963 10 3	...	...
1	400 5 3	340 5 3	100 2 0	26 4 9	466 12 0	...	...
4	390 15 0	1,755 3 5	429 12 0	151 3 7	2,336 3 0	...	...
6	864 0 0	3,232 0 0	463 14 9	88 2 6	3,784 1 3	...	...
2	216 0 0	960 0 0	262 13 0	43 15 6	1,267 12 6	...	...
14	1,488 0 0	6,168 0 0	1,860 0 0	461 8 0	8,479 8 0	...	...
24	3,901 12 6	9,920 5 4	3,501 14 5	1,075 8 14	14,497 12 8	...	...
1	197 14 0	929 14 0	240 0 0	85 11 0	1,255 9 0	...	...
1	101 0 0	233 0 0	190 0 0	105 0 0	528 0 0	...	...
65	7,606 12 9	30,815 10 0	8,151 5 2	3,219 13 0	42,186 12 2	...	...

STATEMENT No. II—*concld.*

No.	Circles and Districts.	Paid from—*contd.*			Total.	Number of all successful Vaccinations and Re-vaccinations.	Average cost of each successful case.
		Local Funds.	Municipalities.	Indian States.			
		Rs.	Rs.	Rs. a. p.	Rs. a. p.		Rs. a. p.
1	Idar State	...	...	3,481 9 0	3,481 9 0	10,113	0 5 6
2	Cambay	...	...	4,105 14 6	4,105 14 6	2,728	1 8 7
3	Akalkot	...	...	1,963 10 3	1,963 10 3	3,277	0 9 7
4	Phaltan	...	...	466 12 0	466 12 0	1,502	0 4 11
5	Bhor	...	...	2,336 3 0	2,336 3 0	4,470	0 8 4
6	Savantwadi	...	...	3,784 1 3	3,784 1 3	6,947	0 8 9
7	Aundh (Pant Pratinidhi) ...	...	...	1,287 12 6	1,287 12 6	3,039	0 6 9
8	Kolhapur State	...	...	8,479 8 0	8,479 8 0	33,517	0 4 6
9	S. M. Country States	...	...	14,497 12 8	14,497 12 8	28,629	0 8 1
10	Janjira	...	...	1,255 9 0	1,255 9 0	2,684	0 7 0
11	Bansda	...	...	528 0 0	528 0 0	1,855	0 4 7
	Total ...	...	...	42,186 12 2	42,186 12 2	98,761	0 6 10

STATEMENT IV

STATEMENT

Showing the number of persons primarily vaccinated and the each of the under-

PERSONS PRIMARILY

Establishments.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	YEARS ENDED					
	1920-1921.		1921-1922.		1922-1923.	
Idar	5,805	5,650	5,945	5,825	5,887	5,734
Cambay	1,781	1,769	2,121	2,090	2,047	1,881
Bhor (Pant Sachiv)	2,915	2,786	2,791	2,742	3,135	3,020
Phaltan	1,475	1,450	1,251	1,250	1,245	1,242
Sávantvádi	4,613	4,604	4,819	4,812	5,387	5,382
Aundh	1,743	1,565	1,965	1,824	2,071	1,906
Akalkot	2,953	2,895	3,149	3,072	3,010	2,965
Janjira	2,010	1,987	1,915	1,906	2,019	2,013
Southern Maratha Country States...	20,404	20,269	20,821	20,747	21,062	21,096
Kolhapur	23,681	23,652	24,428	24,419	25,435	25,415
Bansda	1,192	1,094	1,454	1,391	1,262	1,150
Total ...	68,572	67,721	70,659	70,078	72,560	71,714

No. IV

number of those persons who were successfully vaccinated in mentioned years

VACCINATED.

Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated
ON 31ST MARCH.							
1923-1924.		1924-1925.		1925-1926.		1926-1927.	
6,330	6,180	6,021	5,899	5,788	5,768	6,039	5,998
2,167	2,130	2,438	2,384	2,407	2,320	2,295	2,262
2,764	2,707	3,988	3,788	3,921	3,673	3,511	3,335
1,507	1,506	1,356	1,356	1,315	1,315	1,401	1,401
2,496	2,361	6,637	6,637	6,212	6,206	6,321	6,317
6,064	6,063	1,968	1,779	1,615	1,406	2,080	1,902
1,890	1,688	2,970	2,930	2,718	2,692	2,622	2,594
2,145	2,142	2,172	2,166	2,194	2,161	2,164	2,149
20,924	20,866	20,867	20,810	22,241	22,181	21,745	21,637
26,004	25,995	27,158	27,155	26,372	26,361	27,047	27,044
1,496	1,349	1,221	1,173	1,426	1,245	1,190	939
73,787	73,087	76,798	76,078	76,209	75,328	76,415	75,578

STATEMENT No. IV—*concld.*

Establishments.	PERSONS PRIMARILY VACCINATED—*contd.*					
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	YEARS ENDED ON 31ST MARCH—*contd.*					
	1927-1928.		1928-1929.		1929-1930.	
Idar	7,073	7,064	10,153	10,125	9,355	9,325
Cambay	2,314	2,292	2,395	2,382	2,676	2,644
Bhor (Pant Sachiv)	4,184	3,995	4,245	4,054	4,068	3,756
Phaltan	1,448	1,448	1,395	1,395	1,086	1,085
Sávantvádi	6,368	6,360	6,362	6,357	6,514	6,512
Aundh	1,895	1,687	2,134	1,859	2,472	2,236
Akalkot	2,757	2,726	2,826	2,793	2,973	2,894
Janjira	2,028	2,014	2,284	2,277	2,459	2,454
Southern Maratha Country States...	22,706	22,593	21,698	21,610	22,159	22,023
Kolhapur	31,424	31,420	28,669	28,650	28,255	27,497
Bansda	216	166	965	600	1,870	1,032
Total ...	82,413	81,755	83,126	82,082	83,887	81,444

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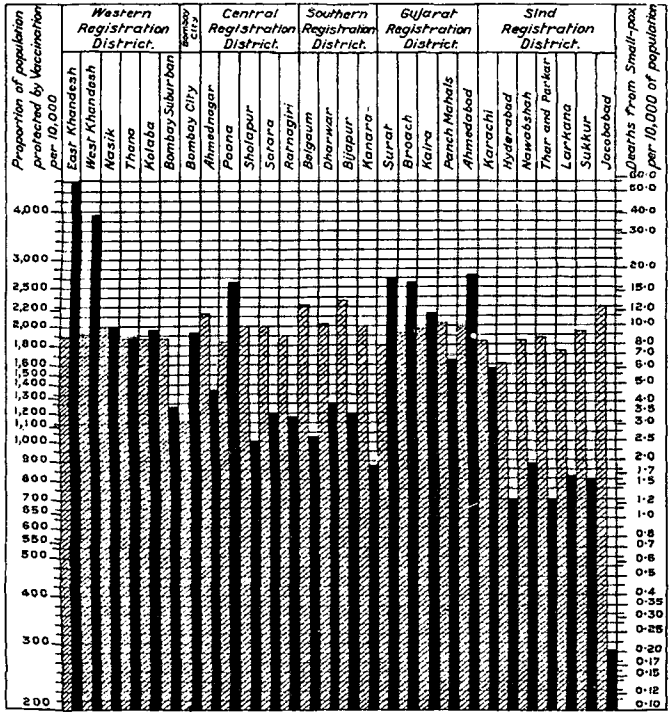
APPENDIX VI

Diagram illustrating the death rates from Small-pox during the year 1929-30 and the proportion of population protected by Vaccination during the seven years period from 1923-24 to 1929-30.

(NOTE:- Scale figures are at Log. interval.)



Proportion of population protected by Vaccination during 7 years ending 31st March 1930.

Ratio of deaths from Small-pox per 10,000 of population during the year 1929-1930.

G.P.Z.O. Poona 1930